

ICMJE DISCLOSURE FORM

Date: 12/2/2021

Your Name: L. A. Liggett

Manuscript Title: Clonal Hematopoiesis in Sickle Cell Disease

Manuscript Number (if known): 156060-JCI-CMED-RV-2

In the interest of transparency, we ask you to disclose all relationships/activities/interests listed below that are related to the content of your manuscript. "Related" means any relation with for-profit or not-for-profit third parties whose interests may be affected by the content of the manuscript. Disclosure represents a commitment to transparency and does not necessarily indicate a bias. If you are in doubt about whether to list a relationship/activity/interest, it is preferable that you do so.

The author's relationships/activities/interests should be defined broadly. For example, if your manuscript pertains to the epidemiology of hypertension, you should declare all relationships with manufacturers of antihypertensive medication, even if that medication is not mentioned in the manuscript.

In item #1 below, report all support for the work reported in this manuscript without time limit. For all other items, the time frame for disclosure is the past 36 months.

		Name all entities with whom you have this relationship or indicate none (add rows as needed)	Specifications/Comments (e.g., if payments were made to you or to your institution)
Time frame: Since the initial planning of the work			
1	All support for the present manuscript (e.g., funding, provision of study materials, medical writing, article processing charges, etc.) No time limit for this item.	<div style="display: flex; justify-content: space-between; align-items: flex-start;"> <div style="width: 60%;"> <input checked="" type="checkbox"/> None </div> <div style="width: 35%; border: 1px solid black; height: 100px; position: relative;"> <div style="position: absolute; top: 5px; right: 5px; font-size: 0.8em; color: #ccc;">Click the tab key to add additional rows.</div> </div> </div>	
Time frame: past 36 months			
2	Grants or contracts from any entity (if not indicated in item #1 above).	<div style="display: flex; justify-content: space-between; align-items: flex-start;"> <div style="width: 60%;"> <input checked="" type="checkbox"/> None </div> <div style="width: 35%; border: 1px solid black; height: 100px; position: relative;"> <div style="position: absolute; top: 5px; right: 5px; font-size: 0.8em; color: #ccc;">Click the tab key to add additional rows.</div> </div> </div>	
3	Royalties or licenses	<div style="display: flex; justify-content: space-between; align-items: flex-start;"> <div style="width: 60%;"> <input checked="" type="checkbox"/> None </div> <div style="width: 35%; border: 1px solid black; height: 100px; position: relative;"> <div style="position: absolute; top: 5px; right: 5px; font-size: 0.8em; color: #ccc;">Click the tab key to add additional rows.</div> </div> </div>	

4	Consulting fees	<input checked="" type="checkbox"/> None <table border="1" data-bbox="370 205 1505 342"> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> </table>								
5	Payment or honoraria for lectures, presentations, speakers bureaus, manuscript writing or educational events	<input checked="" type="checkbox"/> None <table border="1" data-bbox="370 493 1505 596"> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> </table>								
6	Payment for expert testimony	<input checked="" type="checkbox"/> None <table border="1" data-bbox="370 831 1505 934"> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> </table>								
7	Support for attending meetings and/or travel	<input checked="" type="checkbox"/> None <table border="1" data-bbox="370 1087 1505 1190"> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> </table>								
8	Patents planned, issued or pending	<input checked="" type="checkbox"/> None <table border="1" data-bbox="370 1344 1505 1446"> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> </table>								
9	Participation on a Data Safety Monitoring Board or Advisory Board	<input checked="" type="checkbox"/> None <table border="1" data-bbox="370 1600 1505 1703"> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> </table>								
10	Leadership or fiduciary role in other board, society, committee or	<input checked="" type="checkbox"/> None <table border="1" data-bbox="370 1856 1505 1959"> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> </table>								

	advocacy group, paid or unpaid		
11	Stock or stock options	<input checked="" type="checkbox"/> None	
12	Receipt of equipment, materials, drugs, medical writing, gifts or other services	<input checked="" type="checkbox"/> None	
13	Other financial or non-financial interests	<input checked="" type="checkbox"/> None	
<p>Please place an "X" next to the following statement to indicate your agreement:</p> <p><input checked="" type="checkbox"/> I certify that I have answered every question and have not altered the wording of any of the questions on this form.</p>			

ICMJE DISCLOSURE FORM

Date: 12/9/2021

Your Name: Liam David Cato

Manuscript Title: Clonal Hematopoiesis in Sickle Cell Disease

Manuscript Number (if known): 156060-JCI-CMED-RV-2

In the interest of transparency, we ask you to disclose all relationships/activities/interests listed below that are related to the content of your manuscript. "Related" means any relation with for-profit or not-for-profit third parties whose interests may be affected by the content of the manuscript. Disclosure represents a commitment to transparency and does not necessarily indicate a bias. If you are in doubt about whether to list a relationship/activity/interest, it is preferable that you do so.

The author's relationships/activities/interests should be defined broadly. For example, if your manuscript pertains to the epidemiology of hypertension, you should declare all relationships with manufacturers of antihypertensive medication, even if that medication is not mentioned in the manuscript.

In item #1 below, report all support for the work reported in this manuscript without time limit. For all other items, the time frame for disclosure is the past 36 months.

	Name all entities with whom you have this relationship or indicate none (add rows as needed)	Specifications/Comments (e.g., if payments were made to you or to your institution)						
Time frame: Since the initial planning of the work								
1	<div>All support for the present manuscript (e.g., funding, provision of study materials, medical writing, article processing charges, etc.) No time limit for this item.</div> <div><input checked="" type="checkbox"/> None</div> <table><tr><td></td><td></td></tr><tr><td></td><td></td></tr><tr><td></td><td>Click the tab key to add additional rows.</td></tr></table>						Click the tab key to add additional rows.	
	Click the tab key to add additional rows.							
Time frame: past 36 months								
2	<div>Grants or contracts from any entity (if not indicated in item #1 above).</div> <div><input checked="" type="checkbox"/> None</div> <table><tr><td></td><td></td></tr><tr><td></td><td></td></tr><tr><td></td><td></td></tr></table>							
3	<div>Royalties or licenses</div> <div><input checked="" type="checkbox"/> None</div> <table><tr><td></td><td></td></tr><tr><td></td><td></td></tr><tr><td></td><td></td></tr></table>							

4	Consulting fees	<input checked="" type="checkbox"/> None <table border="1" data-bbox="370 205 1505 342"> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> </table>								
5	Payment or honoraria for lectures, presentations, speakers bureaus, manuscript writing or educational events	<input checked="" type="checkbox"/> None <table border="1" data-bbox="370 493 1505 596"> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> </table>								
6	Payment for expert testimony	<input checked="" type="checkbox"/> None <table border="1" data-bbox="370 831 1505 934"> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> </table>								
7	Support for attending meetings and/or travel	<input checked="" type="checkbox"/> None <table border="1" data-bbox="370 1087 1505 1190"> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> </table>								
8	Patents planned, issued or pending	<input checked="" type="checkbox"/> None <table border="1" data-bbox="370 1344 1505 1446"> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> </table>								
9	Participation on a Data Safety Monitoring Board or Advisory Board	<input checked="" type="checkbox"/> None <table border="1" data-bbox="370 1600 1505 1703"> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> </table>								
10	Leadership or fiduciary role in other board, society, committee or	<input checked="" type="checkbox"/> None <table border="1" data-bbox="370 1856 1505 1959"> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> </table>								

	advocacy group, paid or unpaid		
11	Stock or stock options	<input checked="" type="checkbox"/> None	
12	Receipt of equipment, materials, drugs, medical writing, gifts or other services	<input checked="" type="checkbox"/> None	
13	Other financial or non-financial interests	<input checked="" type="checkbox"/> None	
<p>Please place an "X" next to the following statement to indicate your agreement:</p> <p><input checked="" type="checkbox"/> I certify that I have answered every question and have not altered the wording of any of the questions on this form.</p>			

ICMJE DISCLOSURE FORM

Date: 12/10/2021

Your Name: Joshua Weinstock

Manuscript Title: Clonal Hematopoiesis in Sickle Cell Disease

Manuscript Number (if known): 156060-JCI-CMED-RV-2

In the interest of transparency, we ask you to disclose all relationships/activities/interests listed below that are related to the content of your manuscript. "Related" means any relation with for-profit or not-for-profit third parties whose interests may be affected by the content of the manuscript. Disclosure represents a commitment to transparency and does not necessarily indicate a bias. If you are in doubt about whether to list a relationship/activity/interest, it is preferable that you do so.

The author's relationships/activities/interests should be defined broadly. For example, if your manuscript pertains to the epidemiology of hypertension, you should declare all relationships with manufacturers of antihypertensive medication, even if that medication is not mentioned in the manuscript.

In item #1 below, report all support for the work reported in this manuscript without time limit. For all other items, the time frame for disclosure is the past 36 months.

		Name all entities with whom you have this relationship or indicate none (add rows as needed)	Specifications/Comments (e.g., if payments were made to you or to your institution)						
Time frame: Since the initial planning of the work									
1	All support for the present manuscript (e.g., funding, provision of study materials, medical writing, article processing charges, etc.) No time limit for this item.	<div style="display: flex; align-items: flex-start;"> <input checked="" type="checkbox"/> None <table border="1" style="margin-top: 10px; width: 100%; border-collapse: collapse;"> <tr><td style="height: 20px;"></td><td style="height: 20px;"></td></tr> <tr><td style="height: 20px;"></td><td style="height: 20px;"></td></tr> <tr><td style="height: 20px;"></td><td style="height: 20px;"></td></tr> </table> </div>							
Time frame: past 36 months									
2	Grants or contracts from any entity (if not indicated in item #1 above).	<div style="display: flex; align-items: flex-start;"> <input type="checkbox"/> None <table border="1" style="margin-top: 10px; width: 100%; border-collapse: collapse;"> <tr><td style="height: 20px;">NHLBI BioData Catalyst</td><td style="height: 20px;"></td></tr> <tr><td style="height: 20px;"></td><td style="height: 20px;"></td></tr> <tr><td style="height: 20px;"></td><td style="height: 20px;"></td></tr> </table> </div>		NHLBI BioData Catalyst					
NHLBI BioData Catalyst									
3	Royalties or licenses	<div style="display: flex; align-items: flex-start;"> <input checked="" type="checkbox"/> None <table border="1" style="margin-top: 10px; width: 100%; border-collapse: collapse;"> <tr><td style="height: 20px;"></td><td style="height: 20px;"></td></tr> <tr><td style="height: 20px;"></td><td style="height: 20px;"></td></tr> <tr><td style="height: 20px;"></td><td style="height: 20px;"></td></tr> </table> </div>							

4	Consulting fees	<input checked="" type="checkbox"/> None <table border="1" data-bbox="370 205 1507 342"> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> </table>								
5	Payment or honoraria for lectures, presentations, speakers bureaus, manuscript writing or educational events	<input checked="" type="checkbox"/> None <table border="1" data-bbox="370 493 1507 598"> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> </table>								
6	Payment for expert testimony	<input checked="" type="checkbox"/> None <table border="1" data-bbox="370 833 1507 938"> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> </table>								
7	Support for attending meetings and/or travel	<input checked="" type="checkbox"/> None <table border="1" data-bbox="370 1089 1507 1194"> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> </table>								
8	Patents planned, issued or pending	<input type="checkbox"/> None <table border="1" data-bbox="370 1346 1507 1482"> <tr> <td>J. Weinstock has filed a patent related to a method for estimating clonal expansion.</td> <td></td> </tr> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> </table>	J. Weinstock has filed a patent related to a method for estimating clonal expansion.							
J. Weinstock has filed a patent related to a method for estimating clonal expansion.										
9	Participation on a Data Safety Monitoring Board or Advisory Board	<input checked="" type="checkbox"/> None <table border="1" data-bbox="370 1633 1507 1738"> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> </table>								
10	Leadership or fiduciary role in other board, society, committee or	<input checked="" type="checkbox"/> None <table border="1" data-bbox="370 1890 1507 1955"> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> </table>								

	advocacy group, paid or unpaid		
11	Stock or stock options	<input checked="" type="checkbox"/> None	
12	Receipt of equipment, materials, drugs, medical writing, gifts or other services	<input checked="" type="checkbox"/> None	
13	Other financial or non-financial interests	<input checked="" type="checkbox"/> None	
<p>Please place an "X" next to the following statement to indicate your agreement:</p> <p><input checked="" type="checkbox"/> I certify that I have answered every question and have not altered the wording of any of the questions on this form.</p>			

ICMJE DISCLOSURE FORM

Date: 12/9/2021

Your Name: Yingze Zhang

Manuscript Title: Clonal Hematopoiesis in Sickle Cell Disease

Manuscript Number (if known): 156060-JCI-CMED-RV-2

In the interest of transparency, we ask you to disclose all relationships/activities/interests listed below that are related to the content of your manuscript. "Related" means any relation with for-profit or not-for-profit third parties whose interests may be affected by the content of the manuscript. Disclosure represents a commitment to transparency and does not necessarily indicate a bias. If you are in doubt about whether to list a relationship/activity/interest, it is preferable that you do so.

The author's relationships/activities/interests should be defined broadly. For example, if your manuscript pertains to the epidemiology of hypertension, you should declare all relationships with manufacturers of antihypertensive medication, even if that medication is not mentioned in the manuscript.

In item #1 below, report all support for the work reported in this manuscript without time limit. For all other items, the time frame for disclosure is the past 36 months.

		Name all entities with whom you have this relationship or indicate none (add rows as needed)	Specifications/Comments (e.g., if payments were made to you or to your institution)						
Time frame: Since the initial planning of the work									
1	All support for the present manuscript (e.g., funding, provision of study materials, medical writing, article processing charges, etc.) No time limit for this item.	<div style="display: flex; align-items: flex-start;"> <input checked="" type="checkbox"/> None <table border="1" style="margin-top: 10px; width: 100%; border-collapse: collapse;"> <tr><td style="height: 20px;"></td><td style="height: 20px;"></td></tr> <tr><td style="height: 20px;"></td><td style="height: 20px;"></td></tr> <tr><td style="height: 20px;"></td><td style="height: 20px;"></td></tr> </table> </div>							
Time frame: past 36 months									
2	Grants or contracts from any entity (if not indicated in item #1 above).	<div style="display: flex; align-items: flex-start;"> <input checked="" type="checkbox"/> None <table border="1" style="margin-top: 10px; width: 100%; border-collapse: collapse;"> <tr><td style="height: 20px;"></td><td style="height: 20px;"></td></tr> <tr><td style="height: 20px;"></td><td style="height: 20px;"></td></tr> <tr><td style="height: 20px;"></td><td style="height: 20px;"></td></tr> </table> </div>							
3	Royalties or licenses	<div style="display: flex; align-items: flex-start;"> <input checked="" type="checkbox"/> None <table border="1" style="margin-top: 10px; width: 100%; border-collapse: collapse;"> <tr><td style="height: 20px;"></td><td style="height: 20px;"></td></tr> <tr><td style="height: 20px;"></td><td style="height: 20px;"></td></tr> <tr><td style="height: 20px;"></td><td style="height: 20px;"></td></tr> </table> </div>							

4	Consulting fees	<input checked="" type="checkbox"/> None <table border="1" data-bbox="370 205 1507 342"> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> </table>								
5	Payment or honoraria for lectures, presentations, speakers bureaus, manuscript writing or educational events	<input checked="" type="checkbox"/> None <table border="1" data-bbox="370 493 1507 596"> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> </table>								
6	Payment for expert testimony	<input checked="" type="checkbox"/> None <table border="1" data-bbox="370 833 1507 936"> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> </table>								
7	Support for attending meetings and/or travel	<input checked="" type="checkbox"/> None <table border="1" data-bbox="370 1089 1507 1192"> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> </table>								
8	Patents planned, issued or pending	<input checked="" type="checkbox"/> None <table border="1" data-bbox="370 1346 1507 1449"> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> </table>								
9	Participation on a Data Safety Monitoring Board or Advisory Board	<input checked="" type="checkbox"/> None <table border="1" data-bbox="370 1602 1507 1705"> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> </table>								
10	Leadership or fiduciary role in other board, society, committee or	<input checked="" type="checkbox"/> None <table border="1" data-bbox="370 1858 1507 1961"> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> </table>								

	advocacy group, paid or unpaid		
11	Stock or stock options	<input checked="" type="checkbox"/> None	
12	Receipt of equipment, materials, drugs, medical writing, gifts or other services	<input checked="" type="checkbox"/> None	
13	Other financial or non-financial interests	<input checked="" type="checkbox"/> None	
<p>Please place an "X" next to the following statement to indicate your agreement:</p> <p><input checked="" type="checkbox"/> I certify that I have answered every question and have not altered the wording of any of the questions on this form.</p>			

ICMJE DISCLOSURE FORM

Date: 12/9/2021

Your Name: S. Mehdi Nouraie

Manuscript Title: Clonal Hematopoiesis in Sickle Cell Disease

Manuscript Number (if known): 156060-JCI-CMED-RV-2

In the interest of transparency, we ask you to disclose all relationships/activities/interests listed below that are related to the content of your manuscript. "Related" means any relation with for-profit or not-for-profit third parties whose interests may be affected by the content of the manuscript. Disclosure represents a commitment to transparency and does not necessarily indicate a bias. If you are in doubt about whether to list a relationship/activity/interest, it is preferable that you do so.

The author's relationships/activities/interests should be defined broadly. For example, if your manuscript pertains to the epidemiology of hypertension, you should declare all relationships with manufacturers of antihypertensive medication, even if that medication is not mentioned in the manuscript.

In item #1 below, report all support for the work reported in this manuscript without time limit. For all other items, the time frame for disclosure is the past 36 months.

		Name all entities with whom you have this relationship or indicate none (add rows as needed)	Specifications/Comments (e.g., if payments were made to you or to your institution)						
Time frame: Since the initial planning of the work									
1	All support for the present manuscript (e.g., funding, provision of study materials, medical writing, article processing charges, etc.) No time limit for this item.	<div style="display: flex; align-items: flex-start;"> <input checked="" type="checkbox"/> None </div> <table border="1" style="width: 100%; margin-top: 10px;"> <tr><td style="height: 20px;"></td><td style="height: 20px;"></td></tr> <tr><td style="height: 20px;"></td><td style="height: 20px;"></td></tr> <tr><td style="height: 20px;"></td><td style="height: 20px;"></td></tr> </table>							
Time frame: past 36 months									
2	Grants or contracts from any entity (if not indicated in item #1 above).	<div style="display: flex; align-items: flex-start;"> <input type="checkbox"/> None </div> <table border="1" style="width: 100%; margin-top: 10px;"> <tr><td style="height: 20px;">NIH</td><td style="height: 20px;">Unrelated to this manuscript.</td></tr> <tr><td style="height: 20px;"></td><td style="height: 20px;"></td></tr> <tr><td style="height: 20px;"></td><td style="height: 20px;"></td></tr> </table>		NIH	Unrelated to this manuscript.				
NIH	Unrelated to this manuscript.								
3	Royalties or licenses	<div style="display: flex; align-items: flex-start;"> <input checked="" type="checkbox"/> None </div> <table border="1" style="width: 100%; margin-top: 10px;"> <tr><td style="height: 20px;"></td><td style="height: 20px;"></td></tr> <tr><td style="height: 20px;"></td><td style="height: 20px;"></td></tr> <tr><td style="height: 20px;"></td><td style="height: 20px;"></td></tr> </table>							

4	Consulting fees	<input type="checkbox"/> None <table border="1" data-bbox="370 205 1507 342"> <tr> <td>Phoenicia BioSciences</td> <td>Made to me but unrelated to this publication.</td> </tr> <tr> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> </tr> </table>		Phoenicia BioSciences	Made to me but unrelated to this publication.						
Phoenicia BioSciences	Made to me but unrelated to this publication.										
5	Payment or honoraria for lectures, presentations, speakers bureaus, manuscript writing or educational events	<input checked="" type="checkbox"/> None <table border="1" data-bbox="370 495 1507 596"> <tr> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> </tr> </table>									
6	Payment for expert testimony	<input checked="" type="checkbox"/> None <table border="1" data-bbox="370 833 1507 936"> <tr> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> </tr> </table>									
7	Support for attending meetings and/or travel	<input checked="" type="checkbox"/> None <table border="1" data-bbox="370 1092 1507 1192"> <tr> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> </tr> </table>									
8	Patents planned, issued or pending	<input checked="" type="checkbox"/> None <table border="1" data-bbox="370 1348 1507 1449"> <tr> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> </tr> </table>									
9	Participation on a Data Safety Monitoring Board or Advisory Board	<input type="checkbox"/> None <table border="1" data-bbox="370 1604 1507 1705"> <tr> <td>Phoenicia BioSciences</td> <td>Made to me but unrelated to this publication.</td> </tr> <tr> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> </tr> </table>		Phoenicia BioSciences	Made to me but unrelated to this publication.						
Phoenicia BioSciences	Made to me but unrelated to this publication.										
10	Leadership or fiduciary role in other board, society, committee or	<input checked="" type="checkbox"/> None <table border="1" data-bbox="370 1860 1507 1961"> <tr> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> </tr> </table>									

	advocacy group, paid or unpaid		
11	Stock or stock options	<input checked="" type="checkbox"/> None	
12	Receipt of equipment, materials, drugs, medical writing, gifts or other services	<input checked="" type="checkbox"/> None	
13	Other financial or non-financial interests	<input checked="" type="checkbox"/> None	
<p>Please place an "X" next to the following statement to indicate your agreement:</p> <p><input checked="" type="checkbox"/> I certify that I have answered every question and have not altered the wording of any of the questions on this form.</p>			

ICMJE DISCLOSURE FORM

Date: 12/9/2021

Your Name: Mark Gladwin

Manuscript Title: Clonal Hematopoiesis in Sickle Cell Disease

Manuscript Number (if known): 156060-JCI-CMED-RV-2

In the interest of transparency, we ask you to disclose all relationships/activities/interests listed below that are related to the content of your manuscript. "Related" means any relation with for-profit or not-for-profit third parties whose interests may be affected by the content of the manuscript. Disclosure represents a commitment to transparency and does not necessarily indicate a bias. If you are in doubt about whether to list a relationship/activity/interest, it is preferable that you do so.

The author's relationships/activities/interests should be defined broadly. For example, if your manuscript pertains to the epidemiology of hypertension, you should declare all relationships with manufacturers of antihypertensive medication, even if that medication is not mentioned in the manuscript.

In item #1 below, report all support for the work reported in this manuscript without time limit. For all other items, the time frame for disclosure is the past 36 months.

	Name all entities with whom you have this relationship or indicate none (add rows as needed)	Specifications/Comments (e.g., if payments were made to you or to your institution)						
Time frame: Since the initial planning of the work								
1	All support for the present manuscript (e.g., funding, provision of study materials, medical writing, article processing charges, etc.) No time limit for this item.	<div style="margin-bottom: 10px;"> <input type="checkbox"/> None </div> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 60%;">HHSN268200617182C</td> <td></td> </tr> <tr> <td> </td> <td></td> </tr> <tr> <td> </td> <td>Click the tab key to add additional rows.</td> </tr> </table>	HHSN268200617182C					Click the tab key to add additional rows.
HHSN268200617182C								
	Click the tab key to add additional rows.							
Time frame: past 36 months								
2	Grants or contracts from any entity (if not indicated in item #1 above).	<div style="margin-bottom: 10px;"> <input type="checkbox"/> None </div> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 60%;">Dr. Gladwin is a principal investigator in a research collaboration with Bayer Pharmaceuticals to evaluate riociguat as a treatment for patients with SCD. Not related to manuscript subject.</td> <td></td> </tr> <tr> <td> </td> <td></td> </tr> <tr> <td> </td> <td></td> </tr> </table>	Dr. Gladwin is a principal investigator in a research collaboration with Bayer Pharmaceuticals to evaluate riociguat as a treatment for patients with SCD. Not related to manuscript subject.					
Dr. Gladwin is a principal investigator in a research collaboration with Bayer Pharmaceuticals to evaluate riociguat as a treatment for patients with SCD. Not related to manuscript subject.								

3	Royalties or licenses	<input type="checkbox"/> None <table border="1" data-bbox="370 205 1503 338"> <tr> <td data-bbox="370 205 938 268">Textbook authorship royalties (MedMaster) – not related to manuscript subject.</td> <td data-bbox="938 205 1503 268"></td> </tr> <tr> <td data-bbox="370 268 938 300"></td> <td data-bbox="938 268 1503 300"></td> </tr> <tr> <td data-bbox="370 300 938 338"></td> <td data-bbox="938 300 1503 338"></td> </tr> </table>		Textbook authorship royalties (MedMaster) – not related to manuscript subject.							
Textbook authorship royalties (MedMaster) – not related to manuscript subject.											
4	Consulting fees	<input type="checkbox"/> None <table border="1" data-bbox="370 491 1503 724"> <tr> <td data-bbox="370 491 938 623">Dr. Gladwin is actively serving as a scientific consultant for Actelion, Bayer Healthcare, Pfizer, Forma, and Fulcrum Therapeutics. Not related to the subject matter in the manuscript.</td> <td data-bbox="938 491 1503 623"></td> </tr> <tr> <td data-bbox="370 623 938 655"></td> <td data-bbox="938 623 1503 655"></td> </tr> <tr> <td data-bbox="370 655 938 686"></td> <td data-bbox="938 655 1503 686"></td> </tr> <tr> <td data-bbox="370 686 938 724"></td> <td data-bbox="938 686 1503 724"></td> </tr> </table>		Dr. Gladwin is actively serving as a scientific consultant for Actelion, Bayer Healthcare, Pfizer, Forma, and Fulcrum Therapeutics. Not related to the subject matter in the manuscript.							
Dr. Gladwin is actively serving as a scientific consultant for Actelion, Bayer Healthcare, Pfizer, Forma, and Fulcrum Therapeutics. Not related to the subject matter in the manuscript.											
5	Payment or honoraria for lectures, presentations, speakers bureaus, manuscript writing or educational events	<input checked="" type="checkbox"/> None <table border="1" data-bbox="370 877 1503 980"> <tr> <td data-bbox="370 877 938 909"></td> <td data-bbox="938 877 1503 909"></td> </tr> <tr> <td data-bbox="370 909 938 940"></td> <td data-bbox="938 909 1503 940"></td> </tr> <tr> <td data-bbox="370 940 938 980"></td> <td data-bbox="938 940 1503 980"></td> </tr> </table>									
6	Payment for expert testimony	<input checked="" type="checkbox"/> None <table border="1" data-bbox="370 1218 1503 1320"> <tr> <td data-bbox="370 1218 938 1249"></td> <td data-bbox="938 1218 1503 1249"></td> </tr> <tr> <td data-bbox="370 1249 938 1281"></td> <td data-bbox="938 1249 1503 1281"></td> </tr> <tr> <td data-bbox="370 1281 938 1320"></td> <td data-bbox="938 1281 1503 1320"></td> </tr> </table>									
7	Support for attending meetings and/or travel	<input checked="" type="checkbox"/> None <table border="1" data-bbox="370 1474 1503 1577"> <tr> <td data-bbox="370 1474 938 1505"></td> <td data-bbox="938 1474 1503 1505"></td> </tr> <tr> <td data-bbox="370 1505 938 1537"></td> <td data-bbox="938 1505 1503 1537"></td> </tr> <tr> <td data-bbox="370 1537 938 1577"></td> <td data-bbox="938 1537 1503 1577"></td> </tr> </table>									
8	Patents planned, issued or pending	<input type="checkbox"/> None <table border="1" data-bbox="370 1730 1503 1959"> <tr> <td data-bbox="370 1730 938 1959">Dr. Gladwin is a co-inventor of patents and patent applications directed to the use of recombinant neuroglobin and heme-based molecules as antidotes for CO poisoning, which have been licensed by Globin Solutions, Inc. Dr. Gladwin is</td> <td data-bbox="938 1730 1503 1959"></td> </tr> </table>		Dr. Gladwin is a co-inventor of patents and patent applications directed to the use of recombinant neuroglobin and heme-based molecules as antidotes for CO poisoning, which have been licensed by Globin Solutions, Inc. Dr. Gladwin is							
Dr. Gladwin is a co-inventor of patents and patent applications directed to the use of recombinant neuroglobin and heme-based molecules as antidotes for CO poisoning, which have been licensed by Globin Solutions, Inc. Dr. Gladwin is											

		<p>also co-inventor on patents directed to the use of nitrite salts in cardiovascular diseases, which were previously licensed to United Therapeutics, and is now licensed to Globin Solutions and Hope Pharmaceuticals. Not related to manuscript subject matter.</p>	
9	Participation on a Data Safety Monitoring Board or Advisory Board	<input checked="" type="checkbox"/> None	
10	Leadership or fiduciary role in other board, society, committee or advocacy group, paid or unpaid	<input type="checkbox"/> None	
		NHLBI Sickle Cell Disease Advisory Committee. SCDAC	
11	Stock or stock options	<input checked="" type="checkbox"/> None	
12	Receipt of equipment, materials, drugs, medical writing, gifts or other services	<input checked="" type="checkbox"/> None	
13	Other financial or non-financial interests	<input type="checkbox"/> None	
		Dr. Gladwin is a shareholder, advisor, and director in Globin Solutions, Inc. This is a CO-poisoning related company, not related to the subject matter in the manuscript.	

Please place an “X” next to the following statement to indicate your agreement:

☒ I certify that I have answered every question and have not altered the wording of any of the questions on this form.

ICMJE DISCLOSURE FORM

Date: 12/9/2021

Your Name: Melanie Kail

Manuscript Title: Clonal Hematopoiesis in Sickle Cell Disease

Manuscript Number (if known): 156060-JCI-CMED-RV-2

In the interest of transparency, we ask you to disclose all relationships/activities/interests listed below that are related to the content of your manuscript. "Related" means any relation with for-profit or not-for-profit third parties whose interests may be affected by the content of the manuscript. Disclosure represents a commitment to transparency and does not necessarily indicate a bias. If you are in doubt about whether to list a relationship/activity/interest, it is preferable that you do so.

The author's relationships/activities/interests should be defined broadly. For example, if your manuscript pertains to the epidemiology of hypertension, you should declare all relationships with manufacturers of antihypertensive medication, even if that medication is not mentioned in the manuscript.

In item #1 below, report all support for the work reported in this manuscript without time limit. For all other items, the time frame for disclosure is the past 36 months.

		Name all entities with whom you have this relationship or indicate none (add rows as needed)	Specifications/Comments (e.g., if payments were made to you or to your institution)						
Time frame: Since the initial planning of the work									
1	All support for the present manuscript (e.g., funding, provision of study materials, medical writing, article processing charges, etc.) No time limit for this item.	<div style="margin-bottom: 10px;"> <input type="checkbox"/> None </div> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 60%; padding: 2px;">NIH NHLBI R01HL68959, HL79915, HL70769, HL87681</td> <td style="padding: 2px;">Grant funding used to collect OMG-SCD cohort</td> </tr> <tr> <td style="padding: 2px;">Doris Duke Charitable Foundation</td> <td style="padding: 2px;">Grant funding used to support work on the manuscript</td> </tr> <tr> <td colspan="2" style="padding: 2px; font-size: small;">Click the tab key to add additional rows.</td> </tr> </table>		NIH NHLBI R01HL68959, HL79915, HL70769, HL87681	Grant funding used to collect OMG-SCD cohort	Doris Duke Charitable Foundation	Grant funding used to support work on the manuscript	Click the tab key to add additional rows.	
NIH NHLBI R01HL68959, HL79915, HL70769, HL87681	Grant funding used to collect OMG-SCD cohort								
Doris Duke Charitable Foundation	Grant funding used to support work on the manuscript								
Click the tab key to add additional rows.									
Time frame: past 36 months									
2	Grants or contracts from any entity (if not indicated in item #1 above).	<div style="margin-bottom: 10px;"> <input checked="" type="checkbox"/> None </div> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr><td style="width: 60%; height: 20px;"></td><td></td></tr> <tr><td style="height: 20px;"></td><td></td></tr> <tr><td style="height: 20px;"></td><td></td></tr> </table>							
3	Royalties or licenses	<div style="margin-bottom: 10px;"> <input checked="" type="checkbox"/> None </div> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr><td style="width: 60%; height: 20px;"></td><td></td></tr> <tr><td style="height: 20px;"></td><td></td></tr> <tr><td style="height: 20px;"></td><td></td></tr> </table>							

4	Consulting fees	<input checked="" type="checkbox"/> None <table border="1"> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> </table>								
5	Payment or honoraria for lectures, presentations, speakers bureaus, manuscript writing or educational events	<input checked="" type="checkbox"/> None <table border="1"> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> </table>								
6	Payment for expert testimony	<input checked="" type="checkbox"/> None <table border="1"> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> </table>								
7	Support for attending meetings and/or travel	<input checked="" type="checkbox"/> None <table border="1"> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> </table>								
8	Patents planned, issued or pending	<input checked="" type="checkbox"/> None <table border="1"> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> </table>								
9	Participation on a Data Safety Monitoring Board or Advisory Board	<input checked="" type="checkbox"/> None <table border="1"> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> </table>								
10	Leadership or fiduciary role in other board, society, committee or	<input type="checkbox"/> None <table border="1"> <tr> <td>TOPMed Sickle Cell Work Group</td> <td>unpaid</td> </tr> <tr> <td>TOPMed Executive Committee</td> <td>unpaid</td> </tr> <tr> <td></td> <td></td> </tr> </table>	TOPMed Sickle Cell Work Group	unpaid	TOPMed Executive Committee	unpaid				
TOPMed Sickle Cell Work Group	unpaid									
TOPMed Executive Committee	unpaid									

	advocacy group, paid or unpaid		
11	Stock or stock options	<input checked="" type="checkbox"/> None	
12	Receipt of equipment, materials, drugs, medical writing, gifts or other services	<input checked="" type="checkbox"/> None	
13	Other financial or non-financial interests	<input checked="" type="checkbox"/> None	
<p>Please place an "X" next to the following statement to indicate your agreement:</p> <p><input checked="" type="checkbox"/> I certify that I have answered every question and have not altered the wording of any of the questions on this form.</p>			

ICMJE DISCLOSURE FORM

Date: 12/9/2021

Your Name: Allison Ashley-Koch

Manuscript Title: Clonal Hematopoiesis in Sickle Cell Disease

Manuscript Number (if known): 156060-JCI-CMED-RV-2

In the interest of transparency, we ask you to disclose all relationships/activities/interests listed below that are related to the content of your manuscript. "Related" means any relation with for-profit or not-for-profit third parties whose interests may be affected by the content of the manuscript. Disclosure represents a commitment to transparency and does not necessarily indicate a bias. If you are in doubt about whether to list a relationship/activity/interest, it is preferable that you do so.

The author's relationships/activities/interests should be defined broadly. For example, if your manuscript pertains to the epidemiology of hypertension, you should declare all relationships with manufacturers of antihypertensive medication, even if that medication is not mentioned in the manuscript.

In item #1 below, report all support for the work reported in this manuscript without time limit. For all other items, the time frame for disclosure is the past 36 months.

		Name all entities with whom you have this relationship or indicate none (add rows as needed)	Specifications/Comments (e.g., if payments were made to you or to your institution)						
Time frame: Since the initial planning of the work									
1	All support for the present manuscript (e.g., funding, provision of study materials, medical writing, article processing charges, etc.) No time limit for this item.	<div style="margin-bottom: 10px;"> <input type="checkbox"/> None </div> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 60%; padding: 2px;">NIH NHLBI R01HL68959, HL79915, HL70769, HL87681</td> <td style="padding: 2px;">Grant funding used to collect OMG-SCD cohort</td> </tr> <tr> <td style="padding: 2px;">Doris Duke Charitable Foundation</td> <td style="padding: 2px;">Grant funding used to support work on the manuscript</td> </tr> <tr> <td colspan="2" style="padding: 2px; text-align: center;"><small>Click the tab key to add additional rows.</small></td> </tr> </table>		NIH NHLBI R01HL68959, HL79915, HL70769, HL87681	Grant funding used to collect OMG-SCD cohort	Doris Duke Charitable Foundation	Grant funding used to support work on the manuscript	<small>Click the tab key to add additional rows.</small>	
NIH NHLBI R01HL68959, HL79915, HL70769, HL87681	Grant funding used to collect OMG-SCD cohort								
Doris Duke Charitable Foundation	Grant funding used to support work on the manuscript								
<small>Click the tab key to add additional rows.</small>									
Time frame: past 36 months									
2	Grants or contracts from any entity (if not indicated in item #1 above).	<div style="margin-bottom: 10px;"> <input checked="" type="checkbox"/> None </div> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr><td style="width: 60%; height: 20px;"></td><td></td></tr> <tr><td style="height: 20px;"></td><td></td></tr> <tr><td style="height: 20px;"></td><td></td></tr> </table>							
3	Royalties or licenses	<div style="margin-bottom: 10px;"> <input checked="" type="checkbox"/> None </div> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr><td style="width: 60%; height: 20px;"></td><td></td></tr> <tr><td style="height: 20px;"></td><td></td></tr> <tr><td style="height: 20px;"></td><td></td></tr> </table>							

4	Consulting fees	<input checked="" type="checkbox"/> None <table border="1" data-bbox="370 205 1507 342"> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> </table>								
5	Payment or honoraria for lectures, presentations, speakers bureaus, manuscript writing or educational events	<input checked="" type="checkbox"/> None <table border="1" data-bbox="370 493 1507 596"> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> </table>								
6	Payment for expert testimony	<input checked="" type="checkbox"/> None <table border="1" data-bbox="370 833 1507 936"> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> </table>								
7	Support for attending meetings and/or travel	<input checked="" type="checkbox"/> None <table border="1" data-bbox="370 1089 1507 1192"> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> </table>								
8	Patents planned, issued or pending	<input checked="" type="checkbox"/> None <table border="1" data-bbox="370 1346 1507 1449"> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> </table>								
9	Participation on a Data Safety Monitoring Board or Advisory Board	<input checked="" type="checkbox"/> None <table border="1" data-bbox="370 1602 1507 1705"> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> </table>								
10	Leadership or fiduciary role in other board, society, committee or	<input type="checkbox"/> None <table border="1" data-bbox="370 1858 1507 1961"> <tr> <td>TOPMed Sickle Cell Work Group</td> <td>unpaid</td> </tr> <tr> <td>TOPMed Executive Committee</td> <td>unpaid</td> </tr> <tr> <td></td> <td></td> </tr> </table>	TOPMed Sickle Cell Work Group	unpaid	TOPMed Executive Committee	unpaid				
TOPMed Sickle Cell Work Group	unpaid									
TOPMed Executive Committee	unpaid									

	advocacy group, paid or unpaid		
11	Stock or stock options	<input checked="" type="checkbox"/> None	
12	Receipt of equipment, materials, drugs, medical writing, gifts or other services	<input checked="" type="checkbox"/> None	
13	Other financial or non-financial interests	<input checked="" type="checkbox"/> None	
<p>Please place an "X" next to the following statement to indicate your agreement:</p> <p><input checked="" type="checkbox"/> I certify that I have answered every question and have not altered the wording of any of the questions on this form.</p>			

ICMJE DISCLOSURE FORM

Date: 12/9/2021

Your Name: Marilyn J Telen

Manuscript Title: Clonal Hematopoiesis in Sickle Cell Disease

Manuscript Number (if known): 156060-JCI-CMED-RV-2

In the interest of transparency, we ask you to disclose all relationships/activities/interests listed below that are related to the content of your manuscript. "Related" means any relation with for-profit or not-for-profit third parties whose interests may be affected by the content of the manuscript. Disclosure represents a commitment to transparency and does not necessarily indicate a bias. If you are in doubt about whether to list a relationship/activity/interest, it is preferable that you do so.

The author's relationships/activities/interests should be defined broadly. For example, if your manuscript pertains to the epidemiology of hypertension, you should declare all relationships with manufacturers of antihypertensive medication, even if that medication is not mentioned in the manuscript.

In item #1 below, report all support for the work reported in this manuscript without time limit. For all other items, the time frame for disclosure is the past 36 months.

	Name all entities with whom you have this relationship or indicate none (add rows as needed)	Specifications/Comments (e.g., if payments were made to you or to your institution)						
Time frame: Since the initial planning of the work								
1	All support for the present manuscript (e.g., funding, provision of study materials, medical writing, article processing charges, etc.) No time limit for this item.	<input type="checkbox"/> None <table border="1"> <tr> <td>NHLBI</td><td>Original grant support for data and specimen collection</td></tr> <tr> <td></td><td></td></tr> <tr> <td></td><td>Click the tab key to add additional rows.</td></tr> </table>	NHLBI	Original grant support for data and specimen collection				Click the tab key to add additional rows.
NHLBI	Original grant support for data and specimen collection							
	Click the tab key to add additional rows.							
Time frame: past 36 months								
2	Grants or contracts from any entity (if not indicated in item #1 above).	<input checked="" type="checkbox"/> None <table border="1"> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> </table>						
3	Royalties or licenses	<input checked="" type="checkbox"/> None <table border="1"> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> </table>						

		Name all entities with whom you have this relationship or indicate none (add rows as needed)	Specifications/Comments (e.g., if payments were made to you or to your institution)								
4	Consulting fees	<input checked="" type="checkbox"/> None <table border="1"> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> </table>									
5	Payment or honoraria for lectures, presentations, speakers bureaus, manuscript writing or educational events	<input checked="" type="checkbox"/> None <table border="1"> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> </table>									
6	Payment for expert testimony	<input checked="" type="checkbox"/> None <table border="1"> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> </table>									
7	Support for attending meetings and/or travel	<input checked="" type="checkbox"/> None <table border="1"> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> </table>									
8	Patents planned, issued or pending	<input checked="" type="checkbox"/> None <table border="1"> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> </table>									
9	Participation on a Data Safety Monitoring Board or Advisory Board	<input checked="" type="checkbox"/> None <table border="1"> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> </table>									
10	Leadership or fiduciary role in other board, society, committee or advocacy group, paid or unpaid	<input checked="" type="checkbox"/> None <table border="1"> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> </table>									

		Name all entities with whom you have this relationship or indicate none (add rows as needed)	Specifications/Comments (e.g., if payments were made to you or to your institution)						
11	Stock or stock options	<input checked="" type="checkbox"/> None <table border="1" data-bbox="383 258 1516 359"> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> </table>							
12	Receipt of equipment, materials, drugs, medical writing, gifts or other services	<input checked="" type="checkbox"/> None <table border="1" data-bbox="383 476 1516 577"> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> </table>							
13	Other financial or non-financial interests	<input type="checkbox"/> None <table border="1" data-bbox="383 690 1516 825"> <tr> <td>I serve on the Executive Committee of the NIH CureSickleCell Initiative</td> <td>Unpaid position, but this work is of particular interest to investigators in gene therapy for SCD</td> </tr> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> </table>		I serve on the Executive Committee of the NIH CureSickleCell Initiative	Unpaid position, but this work is of particular interest to investigators in gene therapy for SCD				
I serve on the Executive Committee of the NIH CureSickleCell Initiative	Unpaid position, but this work is of particular interest to investigators in gene therapy for SCD								

Please place an "X" next to the following statement to indicate your agreement:

☒ I certify that I have answered every question and have not altered the wording of any of the questions on this form.

ICMJE DISCLOSURE FORM

Date: 12/10/2021

Your Name: Brian Custer

Manuscript Title: Clonal Hematopoiesis in Sickle Cell Disease

Manuscript Number (if known): 156060-JCI-CMED-RV-2

In the interest of transparency, we ask you to disclose all relationships/activities/interests listed below that are related to the content of your manuscript. "Related" means any relation with for-profit or not-for-profit third parties whose interests may be affected by the content of the manuscript. Disclosure represents a commitment to transparency and does not necessarily indicate a bias. If you are in doubt about whether to list a relationship/activity/interest, it is preferable that you do so.

The author's relationships/activities/interests should be defined broadly. For example, if your manuscript pertains to the epidemiology of hypertension, you should declare all relationships with manufacturers of antihypertensive medication, even if that medication is not mentioned in the manuscript.

In item #1 below, report all support for the work reported in this manuscript without time limit. For all other items, the time frame for disclosure is the past 36 months.

		Name all entities with whom you have this relationship or indicate none (add rows as needed)	Specifications/Comments (e.g., if payments were made to you or to your institution)						
Time frame: Since the initial planning of the work									
1	All support for the present manuscript (e.g., funding, provision of study materials, medical writing, article processing charges, etc.) No time limit for this item.	<div style="margin-bottom: 10px;"> <input type="checkbox"/> None </div> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%; padding: 2px;">NHLBI</td> <td style="width: 50%; padding: 2px;">To my institution</td> </tr> <tr> <td style="height: 20px;"></td> <td></td> </tr> <tr> <td style="height: 20px;"></td> <td style="text-align: center; font-size: 0.8em;">Click the tab key to add additional rows.</td> </tr> </table>		NHLBI	To my institution				Click the tab key to add additional rows.
NHLBI	To my institution								
	Click the tab key to add additional rows.								
Time frame: past 36 months									
2	Grants or contracts from any entity (if not indicated in item #1 above).	<div style="margin-bottom: 10px;"> <input checked="" type="checkbox"/> None </div> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr><td style="height: 20px;"></td><td></td></tr> <tr><td style="height: 20px;"></td><td></td></tr> <tr><td style="height: 20px;"></td><td></td></tr> </table>							
3	Royalties or licenses	<div style="margin-bottom: 10px;"> <input checked="" type="checkbox"/> None </div> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr><td style="height: 20px;"></td><td></td></tr> <tr><td style="height: 20px;"></td><td></td></tr> <tr><td style="height: 20px;"></td><td></td></tr> </table>							

4	Consulting fees	<input checked="" type="checkbox"/> None <table border="1" data-bbox="370 205 1507 342"> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> </table>								
5	Payment or honoraria for lectures, presentations, speakers bureaus, manuscript writing or educational events	<input checked="" type="checkbox"/> None <table border="1" data-bbox="370 493 1507 596"> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> </table>								
6	Payment for expert testimony	<input checked="" type="checkbox"/> None <table border="1" data-bbox="370 833 1507 936"> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> </table>								
7	Support for attending meetings and/or travel	<input checked="" type="checkbox"/> None <table border="1" data-bbox="370 1089 1507 1192"> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> </table>								
8	Patents planned, issued or pending	<input checked="" type="checkbox"/> None <table border="1" data-bbox="370 1346 1507 1449"> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> </table>								
9	Participation on a Data Safety Monitoring Board or Advisory Board	<input checked="" type="checkbox"/> None <table border="1" data-bbox="370 1602 1507 1705"> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> </table>								
10	Leadership or fiduciary role in other board, society, committee or	<input checked="" type="checkbox"/> None <table border="1" data-bbox="370 1858 1507 1961"> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> </table>								

	advocacy group, paid or unpaid		
11	Stock or stock options	<input checked="" type="checkbox"/> None	
12	Receipt of equipment, materials, drugs, medical writing, gifts or other services	<input checked="" type="checkbox"/> None	
13	Other financial or non-financial interests	<input checked="" type="checkbox"/> None	
<p>Please place an "X" next to the following statement to indicate your agreement:</p> <p><input checked="" type="checkbox"/> I certify that I have answered every question and have not altered the wording of any of the questions on this form.</p>			

ICMJE DISCLOSURE FORM

Date: 12/9/2021

Your Name: Shannon Kelly

Manuscript Title: Clonal Hematopoiesis in Sickle Cell Disease

Manuscript Number (if known): 156060-JCI-CMED-RV-2

In the interest of transparency, we ask you to disclose all relationships/activities/interests listed below that are related to the content of your manuscript. "Related" means any relation with for-profit or not-for-profit third parties whose interests may be affected by the content of the manuscript. Disclosure represents a commitment to transparency and does not necessarily indicate a bias. If you are in doubt about whether to list a relationship/activity/interest, it is preferable that you do so.

The author's relationships/activities/interests should be defined broadly. For example, if your manuscript pertains to the epidemiology of hypertension, you should declare all relationships with manufacturers of antihypertensive medication, even if that medication is not mentioned in the manuscript.

In item #1 below, report all support for the work reported in this manuscript without time limit. For all other items, the time frame for disclosure is the past 36 months.

	Name all entities with whom you have this relationship or indicate none (add rows as needed)	Specifications/Comments (e.g., if payments were made to you or to your institution)
Time frame: Since the initial planning of the work		
1	<input checked="" type="checkbox"/> None All support for the present manuscript (e.g., funding, provision of study materials, medical writing, article processing charges, etc.) No time limit for this item.	NO personal payments to me. The cohort of individuals with sickle cell disease that I helped establish was funded by NHLBI - the Recipient Epidemiology & Donor Evaluation Study (REDS-III) 75N92019D00038
Time frame: past 36 months		
2	<input type="checkbox"/> None Grants or contracts from any entity (if not indicated in item #1 above).	
3	<input checked="" type="checkbox"/> None Royalties or licenses	

		Name all entities with whom you have this relationship or indicate none (add rows as needed)	Specifications/Comments (e.g., if payments were made to you or to your institution)
4	Consulting fees	<input checked="" type="checkbox"/> None	
5	Payment or honoraria for lectures, presentations, speakers bureaus, manuscript writing or educational events	<input checked="" type="checkbox"/> None	
6	Payment for expert testimony	<input checked="" type="checkbox"/> None	
7	Support for attending meetings and/or travel	<input checked="" type="checkbox"/> None	
8	Patents planned, issued or pending	<input checked="" type="checkbox"/> None	
9	Participation on a Data Safety Monitoring Board or Advisory Board	<input checked="" type="checkbox"/> None	
10	Leadership or fiduciary role in other board, society, committee or advocacy group, paid or unpaid	<input checked="" type="checkbox"/> None	

		Name all entities with whom you have this relationship or indicate none (add rows as needed)	Specifications/Comments (e.g., if payments were made to you or to your institution)
11	Stock or stock options	<input checked="" type="checkbox"/> None <div></div> <div></div> <div></div>	
12	Receipt of equipment, materials, drugs, medical writing, gifts or other services	<input checked="" type="checkbox"/> None <div></div> <div></div> <div></div>	
13	Other financial or non-financial interests	<input checked="" type="checkbox"/> None <div></div> <div></div> <div></div>	
<p>Please place an "X" next to the following statement to indicate your agreement:</p> <p><input checked="" type="checkbox"/> I certify that I have answered every question and have not altered the wording of any of the questions on this form.</p>			

ICMJE DISCLOSURE FORM

Date: 12/12/2021

Your Name: Carla Luana Dinardo

Manuscript Title: Clonal Hematopoiesis in Sickle Cell Disease

Manuscript Number (if known): 156060-JCI-CMED-RV-2

In the interest of transparency, we ask you to disclose all relationships/activities/interests listed below that are related to the content of your manuscript. "Related" means any relation with for-profit or not-for-profit third parties whose interests may be affected by the content of the manuscript. Disclosure represents a commitment to transparency and does not necessarily indicate a bias. If you are in doubt about whether to list a relationship/activity/interest, it is preferable that you do so.

The author's relationships/activities/interests should be defined broadly. For example, if your manuscript pertains to the epidemiology of hypertension, you should declare all relationships with manufacturers of antihypertensive medication, even if that medication is not mentioned in the manuscript.

In item #1 below, report all support for the work reported in this manuscript without time limit. For all other items, the time frame for disclosure is the past 36 months.

	Name all entities with whom you have this relationship or indicate none (add rows as needed)	Specifications/Comments (e.g., if payments were made to you or to your institution)						
Time frame: Since the initial planning of the work								
1	All support for the present manuscript (e.g., funding, provision of study materials, medical writing, article processing charges, etc.) No time limit for this item.	<div style="display: flex; align-items: flex-start;"> <div style="margin-right: 10px;"> <input checked="" type="checkbox"/> None </div> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr><td style="height: 20px;"></td><td style="height: 20px;"></td></tr> <tr><td style="height: 20px;"></td><td style="height: 20px;"></td></tr> <tr><td style="height: 20px;"></td><td style="height: 20px;"></td></tr> </table> </div>						
Time frame: past 36 months								
2	Grants or contracts from any entity (if not indicated in item #1 above).	<div style="display: flex; align-items: flex-start;"> <div style="margin-right: 10px;"> <input checked="" type="checkbox"/> None </div> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr><td style="height: 20px;"></td><td style="height: 20px;"></td></tr> <tr><td style="height: 20px;"></td><td style="height: 20px;"></td></tr> <tr><td style="height: 20px;"></td><td style="height: 20px;"></td></tr> </table> </div>						
3	Royalties or licenses	<div style="display: flex; align-items: flex-start;"> <div style="margin-right: 10px;"> <input checked="" type="checkbox"/> None </div> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr><td style="height: 20px;"></td><td style="height: 20px;"></td></tr> <tr><td style="height: 20px;"></td><td style="height: 20px;"></td></tr> <tr><td style="height: 20px;"></td><td style="height: 20px;"></td></tr> </table> </div>						

4	Consulting fees	<input checked="" type="checkbox"/> None <table border="1" data-bbox="370 205 1507 342"> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> </table>								
5	Payment or honoraria for lectures, presentations, speakers bureaus, manuscript writing or educational events	<input checked="" type="checkbox"/> None <table border="1" data-bbox="370 493 1507 596"> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> </table>								
6	Payment for expert testimony	<input checked="" type="checkbox"/> None <table border="1" data-bbox="370 833 1507 936"> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> </table>								
7	Support for attending meetings and/or travel	<input checked="" type="checkbox"/> None <table border="1" data-bbox="370 1089 1507 1192"> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> </table>								
8	Patents planned, issued or pending	<input checked="" type="checkbox"/> None <table border="1" data-bbox="370 1346 1507 1449"> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> </table>								
9	Participation on a Data Safety Monitoring Board or Advisory Board	<input checked="" type="checkbox"/> None <table border="1" data-bbox="370 1602 1507 1705"> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> </table>								
10	Leadership or fiduciary role in other board, society, committee or	<input checked="" type="checkbox"/> None <table border="1" data-bbox="370 1858 1507 1961"> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> </table>								

	advocacy group, paid or unpaid		
11	Stock or stock options	<input checked="" type="checkbox"/> None	
12	Receipt of equipment, materials, drugs, medical writing, gifts or other services	<input checked="" type="checkbox"/> None	
13	Other financial or non-financial interests	<input checked="" type="checkbox"/> None	
<p>Please place an "X" next to the following statement to indicate your agreement:</p> <p><input checked="" type="checkbox"/> I certify that I have answered every question and have not altered the wording of any of the questions on this form.</p>			

ICMJE DISCLOSURE FORM

Date: 12/12/2021

Your Name: Ester C. Sabino

Manuscript Title: Clonal Hematopoiesis in Sickle Cell Disease

Manuscript Number (if known): 156060-JCI-CMED-RV-2

In the interest of transparency, we ask you to disclose all relationships/activities/interests listed below that are related to the content of your manuscript. "Related" means any relation with for-profit or not-for-profit third parties whose interests may be affected by the content of the manuscript. Disclosure represents a commitment to transparency and does not necessarily indicate a bias. If you are in doubt about whether to list a relationship/activity/interest, it is preferable that you do so.

The author's relationships/activities/interests should be defined broadly. For example, if your manuscript pertains to the epidemiology of hypertension, you should declare all relationships with manufacturers of antihypertensive medication, even if that medication is not mentioned in the manuscript.

In item #1 below, report all support for the work reported in this manuscript without time limit. For all other items, the time frame for disclosure is the past 36 months.

		Name all entities with whom you have this relationship or indicate none (add rows as needed)	Specifications/Comments (e.g., if payments were made to you or to your institution)						
Time frame: Since the initial planning of the work									
1	All support for the present manuscript (e.g., funding, provision of study materials, medical writing, article processing charges, etc.) No time limit for this item.	<div style="display: flex; align-items: flex-start;"> <input checked="" type="checkbox"/> None <table border="1" style="margin-left: 20px; width: 100%; border-collapse: collapse;"> <tr><td style="height: 20px;"></td><td style="height: 20px;"></td></tr> <tr><td style="height: 20px;"></td><td style="height: 20px;"></td></tr> <tr><td style="height: 20px;"></td><td style="height: 20px;"></td></tr> </table> </div>							
Time frame: past 36 months									
2	Grants or contracts from any entity (if not indicated in item #1 above).	<div style="display: flex; align-items: flex-start;"> <input checked="" type="checkbox"/> None <table border="1" style="margin-left: 20px; width: 100%; border-collapse: collapse;"> <tr><td style="height: 20px;"></td><td style="height: 20px;"></td></tr> <tr><td style="height: 20px;"></td><td style="height: 20px;"></td></tr> <tr><td style="height: 20px;"></td><td style="height: 20px;"></td></tr> </table> </div>							
3	Royalties or licenses	<div style="display: flex; align-items: flex-start;"> <input checked="" type="checkbox"/> None <table border="1" style="margin-left: 20px; width: 100%; border-collapse: collapse;"> <tr><td style="height: 20px;"></td><td style="height: 20px;"></td></tr> <tr><td style="height: 20px;"></td><td style="height: 20px;"></td></tr> <tr><td style="height: 20px;"></td><td style="height: 20px;"></td></tr> </table> </div>							

4	Consulting fees	<input checked="" type="checkbox"/> None <table border="1" data-bbox="370 205 1507 342"> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> </table>								
5	Payment or honoraria for lectures, presentations, speakers bureaus, manuscript writing or educational events	<input checked="" type="checkbox"/> None <table border="1" data-bbox="370 493 1507 596"> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> </table>								
6	Payment for expert testimony	<input checked="" type="checkbox"/> None <table border="1" data-bbox="370 833 1507 936"> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> </table>								
7	Support for attending meetings and/or travel	<input checked="" type="checkbox"/> None <table border="1" data-bbox="370 1089 1507 1192"> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> </table>								
8	Patents planned, issued or pending	<input checked="" type="checkbox"/> None <table border="1" data-bbox="370 1346 1507 1449"> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> </table>								
9	Participation on a Data Safety Monitoring Board or Advisory Board	<input checked="" type="checkbox"/> None <table border="1" data-bbox="370 1602 1507 1705"> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> </table>								
10	Leadership or fiduciary role in other board, society, committee or	<input checked="" type="checkbox"/> None <table border="1" data-bbox="370 1858 1507 1961"> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> </table>								

	advocacy group, paid or unpaid		
11	Stock or stock options	<input checked="" type="checkbox"/> None	
12	Receipt of equipment, materials, drugs, medical writing, gifts or other services	<input checked="" type="checkbox"/> None	
13	Other financial or non-financial interests	<input checked="" type="checkbox"/> None	
<p>Please place an "X" next to the following statement to indicate your agreement:</p> <p><input checked="" type="checkbox"/> I certify that I have answered every question and have not altered the wording of any of the questions on this form.</p>			

ICMJE DISCLOSURE FORM

Date: 12/9/2021

Your Name: Paula Loureiro

Manuscript Title: Clonal Hematopoiesis in Sickle Cell Disease

Manuscript Number (if known): 156060-JCI-CMED-RV-2

In the interest of transparency, we ask you to disclose all relationships/activities/interests listed below that are related to the content of your manuscript. "Related" means any relation with for-profit or not-for-profit third parties whose interests may be affected by the content of the manuscript. Disclosure represents a commitment to transparency and does not necessarily indicate a bias. If you are in doubt about whether to list a relationship/activity/interest, it is preferable that you do so.

The author's relationships/activities/interests should be defined broadly. For example, if your manuscript pertains to the epidemiology of hypertension, you should declare all relationships with manufacturers of antihypertensive medication, even if that medication is not mentioned in the manuscript.

In item #1 below, report all support for the work reported in this manuscript without time limit. For all other items, the time frame for disclosure is the past 36 months.

		Name all entities with whom you have this relationship or indicate none (add rows as needed)	Specifications/Comments (e.g., if payments were made to you or to your institution)						
Time frame: Since the initial planning of the work									
1	All support for the present manuscript (e.g., funding, provision of study materials, medical writing, article processing charges, etc.) No time limit for this item.	<div style="display: flex; align-items: flex-start;"> <input checked="" type="checkbox"/> None <table border="1" style="margin-left: 20px; width: 100%; border-collapse: collapse;"> <tr><td style="height: 20px;"></td><td style="height: 20px;"></td></tr> <tr><td style="height: 20px;"></td><td style="height: 20px;"></td></tr> <tr><td style="height: 20px;"></td><td style="height: 20px;"></td></tr> </table> </div>							
Time frame: past 36 months									
2	Grants or contracts from any entity (if not indicated in item #1 above).	<div style="display: flex; align-items: flex-start;"> <input checked="" type="checkbox"/> None <table border="1" style="margin-left: 20px; width: 100%; border-collapse: collapse;"> <tr><td style="height: 20px;"></td><td style="height: 20px;"></td></tr> <tr><td style="height: 20px;"></td><td style="height: 20px;"></td></tr> <tr><td style="height: 20px;"></td><td style="height: 20px;"></td></tr> </table> </div>							
3	Royalties or licenses	<div style="display: flex; align-items: flex-start;"> <input checked="" type="checkbox"/> None <table border="1" style="margin-left: 20px; width: 100%; border-collapse: collapse;"> <tr><td style="height: 20px;"></td><td style="height: 20px;"></td></tr> <tr><td style="height: 20px;"></td><td style="height: 20px;"></td></tr> <tr><td style="height: 20px;"></td><td style="height: 20px;"></td></tr> </table> </div>							

4	Consulting fees	<input checked="" type="checkbox"/> None <table border="1" data-bbox="370 205 1507 342"> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> </table>								
5	Payment or honoraria for lectures, presentations, speakers bureaus, manuscript writing or educational events	<input checked="" type="checkbox"/> None <table border="1" data-bbox="370 493 1507 596"> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> </table>								
6	Payment for expert testimony	<input checked="" type="checkbox"/> None <table border="1" data-bbox="370 833 1507 936"> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> </table>								
7	Support for attending meetings and/or travel	<input type="checkbox"/> None <table border="1" data-bbox="370 1089 1507 1192"> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> </table>								
8	Patents planned, issued or pending	<input checked="" type="checkbox"/> None <table border="1" data-bbox="370 1346 1507 1449"> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> </table>								
9	Participation on a Data Safety Monitoring Board or Advisory Board	<input checked="" type="checkbox"/> None <table border="1" data-bbox="370 1602 1507 1705"> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> </table>								
10	Leadership or fiduciary role in other board, society, committee or	<input checked="" type="checkbox"/> None <table border="1" data-bbox="370 1858 1507 1961"> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> </table>								

	advocacy group, paid or unpaid		
11	Stock or stock options	<input checked="" type="checkbox"/> None	
12	Receipt of equipment, materials, drugs, medical writing, gifts or other services	<input checked="" type="checkbox"/> None	
13	Other financial or non-financial interests	<input checked="" type="checkbox"/> None	
<p>Please place an "X" next to the following statement to indicate your agreement:</p> <p><input checked="" type="checkbox"/> I certify that I have answered every question and have not altered the wording of any of the questions on this form.</p>			

ICMJE DISCLOSURE FORM

Date: 11/12/2021

Your Name: ANNA BARBARA F CARNEIRO-PROIETTI

Manuscript Title: Clonal Hematopoiesis in Sick Cell Disease

Manuscript Number (if known): 156060-JCI-CMED-RV-2

In the interest of transparency, we ask you to disclose all relationships/activities/interests listed below that are related to the content of your manuscript. "Related" means any relation with for-profit or not-for-profit third parties whose interests may be affected by the content of the manuscript. Disclosure represents a commitment to transparency and does not necessarily indicate a bias. If you are in doubt about whether to list a relationship/activity/interest, it is preferable that you do so.

The author's relationships/activities/interests should be defined broadly. For example, if your manuscript pertains to the epidemiology of hypertension, you should declare all relationships with manufacturers of antihypertensive medication, even if that medication is not mentioned in the manuscript.

In item #1 below, report all support for the work reported in this manuscript without time limit. For all other items, the time frame for disclosure is the past 36 months.

	Name all entities with whom you have this relationship or indicate none (add rows as needed)	Specifications/Comments (e.g., if payments were made to you or to your institution)						
Time frame: Since the initial planning of the work								
1	All support for the present manuscript (e.g., funding, provision of study materials, medical writing, article processing charges, etc.) No time limit for this item.	<input checked="" type="checkbox"/> None <table border="1"> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> </table> Click the tab key to add additional rows.						
Time frame: past 36 months								
2	Grants or contracts from any entity (if not indicated in item #1 above).	<input checked="" type="checkbox"/> None <table border="1"> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> </table>						
3	Royalties or licenses	<input checked="" type="checkbox"/> None <table border="1"> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> </table>						

		Name all entities with whom you have this relationship or indicate none (add rows as needed)	Specifications/Comments (e.g., if payments were made to you or to your institution)								
4	Consulting fees	<input checked="" type="checkbox"/> None <table border="1"> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> </table>									
5	Payment or honoraria for lectures, presentations, speakers bureaus, manuscript writing or educational events	<input checked="" type="checkbox"/> None <table border="1"> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> </table>									
6	Payment for expert testimony	<input checked="" type="checkbox"/> None <table border="1"> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> </table>									
7	Support for attending meetings and/or travel	<input checked="" type="checkbox"/> None <table border="1"> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> </table>									
8	Patents planned, issued or pending	<input checked="" type="checkbox"/> None <table border="1"> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> </table>									
9	Participation on a Data Safety Monitoring Board or Advisory Board	<input checked="" type="checkbox"/> None <table border="1"> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> </table>									
10	Leadership or fiduciary role in other board, society, committee or advocacy group, paid or unpaid	<input checked="" type="checkbox"/> None <table border="1"> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> </table>									

		Name all entities with whom you have this relationship or indicate none (add rows as needed)	Specifications/Comments (e.g., if payments were made to you or to your institution)						
11	Stock or stock options	<input checked="" type="checkbox"/> None <table border="1"> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> </table>							
12	Receipt of equipment, materials, drugs, medical writing, gifts or other services	<input checked="" type="checkbox"/> None <table border="1"> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> </table>							
13	Other financial or non-financial interests	<input checked="" type="checkbox"/> None <table border="1"> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> </table>							

Please place an "X" next to the following statement to indicate your agreement:

☒ I certify that I have answered every question and have not altered the wording of any of the questions on this form.

Ana Barbara Olt.

ICMJE DISCLOSURE FORM

Date: 12/9/2021

Your Name: Claudia de Alvarenga Maximo

Manuscript Title: Clonal Hematopoiesis in Sickle Cell Disease

Manuscript Number (if known): 156060-JCI-CMED-RV-2

In the interest of transparency, we ask you to disclose all relationships/activities/interests listed below that are related to the content of your manuscript. "Related" means any relation with for-profit or not-for-profit third parties whose interests may be affected by the content of the manuscript. Disclosure represents a commitment to transparency and does not necessarily indicate a bias. If you are in doubt about whether to list a relationship/activity/interest, it is preferable that you do so.

The author's relationships/activities/interests should be defined broadly. For example, if your manuscript pertains to the epidemiology of hypertension, you should declare all relationships with manufacturers of antihypertensive medication, even if that medication is not mentioned in the manuscript.

In item #1 below, report all support for the work reported in this manuscript without time limit. For all other items, the time frame for disclosure is the past 36 months.

	Name all entities with whom you have this relationship or indicate none (add rows as needed)	Specifications/Comments (e.g., if payments were made to you or to your institution)						
Time frame: Since the initial planning of the work								
1	All support for the present manuscript (e.g., funding, provision of study materials, medical writing, article processing charges, etc.) No time limit for this item.	<div style="margin-bottom: 10px;"><input checked="" type="checkbox"/> None</div> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr><td style="height: 20px;"></td><td style="height: 20px;"></td></tr> <tr><td style="height: 20px;"></td><td style="height: 20px;"></td></tr> <tr><td style="height: 20px;"></td><td style="height: 20px;"></td></tr> </table> <div style="font-size: small; color: gray;">Click the tab key to add additional rows.</div>						
Time frame: past 36 months								
2	Grants or contracts from any entity (if not indicated in item #1 above).	<div style="margin-bottom: 10px;"><input checked="" type="checkbox"/> None</div> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr><td style="height: 20px;"></td><td style="height: 20px;"></td></tr> <tr><td style="height: 20px;"></td><td style="height: 20px;"></td></tr> <tr><td style="height: 20px;"></td><td style="height: 20px;"></td></tr> </table>						
3	Royalties or licenses	<div style="margin-bottom: 10px;"><input checked="" type="checkbox"/> None</div> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr><td style="height: 20px;"></td><td style="height: 20px;"></td></tr> <tr><td style="height: 20px;"></td><td style="height: 20px;"></td></tr> <tr><td style="height: 20px;"></td><td style="height: 20px;"></td></tr> </table>						

4	Consulting fees	<input checked="" type="checkbox"/> None <table border="1" data-bbox="368 207 1500 344"> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> </table>								
5	Payment or honoraria for lectures, presentations, speakers bureaus, manuscript writing or educational events	<input checked="" type="checkbox"/> None <table border="1" data-bbox="368 495 1500 598"> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> </table>								
6	Payment for expert testimony	<input checked="" type="checkbox"/> None <table border="1" data-bbox="368 835 1500 938"> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> </table>								
7	Support for attending meetings and/or travel	<input checked="" type="checkbox"/> None <table border="1" data-bbox="368 1092 1500 1194"> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> </table>								
8	Patents planned, issued or pending	<input checked="" type="checkbox"/> None <table border="1" data-bbox="368 1348 1500 1451"> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> </table>								
9	Participation on a Data Safety Monitoring Board or Advisory Board	<input checked="" type="checkbox"/> None <table border="1" data-bbox="368 1604 1500 1707"> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> </table>								
10	Leadership or fiduciary role in other board, society, committee or	<input checked="" type="checkbox"/> None <table border="1" data-bbox="368 1860 1500 1963"> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> </table>								

	advocacy group, paid or unpaid		
11	Stock or stock options	<input checked="" type="checkbox"/> None	
12	Receipt of equipment, materials, drugs, medical writing, gifts or other services	<input checked="" type="checkbox"/> None	
13	Other financial or non-financial interests	<input checked="" type="checkbox"/> None	
<p>Please place an "X" next to the following statement to indicate your agreement:</p> <p><input checked="" type="checkbox"/> I certify that I have answered every question and have not altered the wording of any of the questions on this form.</p>			

ICMJE DISCLOSURE FORM

Date: 12/9/2021

Your Name: Alex P Reiner

Manuscript Title: Clonal Hematopoiesis in Sickle Cell Disease

Manuscript Number (if known): 156060-JCI-CMED-RV-2

In the interest of transparency, we ask you to disclose all relationships/activities/interests listed below that are related to the content of your manuscript. "Related" means any relation with for-profit or not-for-profit third parties whose interests may be affected by the content of the manuscript. Disclosure represents a commitment to transparency and does not necessarily indicate a bias. If you are in doubt about whether to list a relationship/activity/interest, it is preferable that you do so.

The author's relationships/activities/interests should be defined broadly. For example, if your manuscript pertains to the epidemiology of hypertension, you should declare all relationships with manufacturers of antihypertensive medication, even if that medication is not mentioned in the manuscript.

In item #1 below, report all support for the work reported in this manuscript without time limit. For all other items, the time frame for disclosure is the past 36 months.

		Name all entities with whom you have this relationship or indicate none (add rows as needed)	Specifications/Comments (e.g., if payments were made to you or to your institution)						
Time frame: Since the initial planning of the work									
1	All support for the present manuscript (e.g., funding, provision of study materials, medical writing, article processing charges, etc.) No time limit for this item.	<div style="display: flex; align-items: flex-start;"> <input checked="" type="checkbox"/> None <table border="1" style="margin-top: 10px; width: 100%; border-collapse: collapse;"> <tr><td style="height: 20px;"></td><td style="height: 20px;"></td></tr> <tr><td style="height: 20px;"></td><td style="height: 20px;"></td></tr> <tr><td style="height: 20px;"></td><td style="height: 20px;"></td></tr> </table> </div>							
Time frame: past 36 months									
2	Grants or contracts from any entity (if not indicated in item #1 above).	<div style="display: flex; align-items: flex-start;"> <input checked="" type="checkbox"/> None <table border="1" style="margin-top: 10px; width: 100%; border-collapse: collapse;"> <tr><td style="height: 20px;"></td><td style="height: 20px;"></td></tr> <tr><td style="height: 20px;"></td><td style="height: 20px;"></td></tr> <tr><td style="height: 20px;"></td><td style="height: 20px;"></td></tr> </table> </div>							
3	Royalties or licenses	<div style="display: flex; align-items: flex-start;"> <input checked="" type="checkbox"/> None <table border="1" style="margin-top: 10px; width: 100%; border-collapse: collapse;"> <tr><td style="height: 20px;"></td><td style="height: 20px;"></td></tr> <tr><td style="height: 20px;"></td><td style="height: 20px;"></td></tr> <tr><td style="height: 20px;"></td><td style="height: 20px;"></td></tr> </table> </div>							

4	Consulting fees	<input checked="" type="checkbox"/> None <table border="1" data-bbox="370 205 1507 342"> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> </table>								
5	Payment or honoraria for lectures, presentations, speakers bureaus, manuscript writing or educational events	<input checked="" type="checkbox"/> None <table border="1" data-bbox="370 493 1507 596"> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> </table>								
6	Payment for expert testimony	<input checked="" type="checkbox"/> None <table border="1" data-bbox="370 833 1507 936"> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> </table>								
7	Support for attending meetings and/or travel	<input checked="" type="checkbox"/> None <table border="1" data-bbox="370 1089 1507 1192"> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> </table>								
8	Patents planned, issued or pending	<input checked="" type="checkbox"/> None <table border="1" data-bbox="370 1346 1507 1449"> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> </table>								
9	Participation on a Data Safety Monitoring Board or Advisory Board	<input checked="" type="checkbox"/> None <table border="1" data-bbox="370 1602 1507 1705"> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> </table>								
10	Leadership or fiduciary role in other board, society, committee or	<input checked="" type="checkbox"/> None <table border="1" data-bbox="370 1858 1507 1961"> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> </table>								

	advocacy group, paid or unpaid		
11	Stock or stock options	<input checked="" type="checkbox"/> None	
12	Receipt of equipment, materials, drugs, medical writing, gifts or other services	<input checked="" type="checkbox"/> None	
13	Other financial or non-financial interests	<input checked="" type="checkbox"/> None	
<p>Please place an "X" next to the following statement to indicate your agreement:</p> <p><input checked="" type="checkbox"/> I certify that I have answered every question and have not altered the wording of any of the questions on this form.</p>			

ICMJE DISCLOSURE FORM

Date: 12/12/2021

Your Name: Gonçalo R. Abecasis

Manuscript Title: Clonal Hematopoiesis in Sickle Cell Disease

Manuscript Number (if known): 156060-JCI-CMED-RV-2

In the interest of transparency, we ask you to disclose all relationships/activities/interests listed below that are related to the content of your manuscript. "Related" means any relation with for-profit or not-for-profit third parties whose interests may be affected by the content of the manuscript. Disclosure represents a commitment to transparency and does not necessarily indicate a bias. If you are in doubt about whether to list a relationship/activity/interest, it is preferable that you do so.

The author's relationships/activities/interests should be defined broadly. For example, if your manuscript pertains to the epidemiology of hypertension, you should declare all relationships with manufacturers of antihypertensive medication, even if that medication is not mentioned in the manuscript.

In item #1 below, report all support for the work reported in this manuscript without time limit. For all other items, the time frame for disclosure is the past 36 months.

		Name all entities with whom you have this relationship or indicate none (add rows as needed)	Specifications/Comments (e.g., if payments were made to you or to your institution)						
Time frame: Since the initial planning of the work									
1	All support for the present manuscript (e.g., funding, provision of study materials, medical writing, article processing charges, etc.) No time limit for this item.	<div style="display: flex; align-items: flex-start;"> <input checked="" type="checkbox"/> None <table border="1" style="margin-top: 10px; width: 100%; border-collapse: collapse;"> <tr><td style="height: 20px;"></td><td style="height: 20px;"></td></tr> <tr><td style="height: 20px;"></td><td style="height: 20px;"></td></tr> <tr><td style="height: 20px;"></td><td style="height: 20px;"></td></tr> </table> </div>							
Time frame: past 36 months									
2	Grants or contracts from any entity (if not indicated in item #1 above).	<div style="display: flex; align-items: flex-start;"> <input checked="" type="checkbox"/> None <table border="1" style="margin-top: 10px; width: 100%; border-collapse: collapse;"> <tr><td style="height: 20px;"></td><td style="height: 20px;"></td></tr> <tr><td style="height: 20px;"></td><td style="height: 20px;"></td></tr> <tr><td style="height: 20px;"></td><td style="height: 20px;"></td></tr> </table> </div>							
3	Royalties or licenses	<div style="display: flex; align-items: flex-start;"> <input checked="" type="checkbox"/> None <table border="1" style="margin-top: 10px; width: 100%; border-collapse: collapse;"> <tr><td style="height: 20px;"></td><td style="height: 20px;"></td></tr> <tr><td style="height: 20px;"></td><td style="height: 20px;"></td></tr> <tr><td style="height: 20px;"></td><td style="height: 20px;"></td></tr> </table> </div>							

4	Consulting fees	<input checked="" type="checkbox"/> None <table border="1"> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> </table>								
5	Payment or honoraria for lectures, presentations, speakers bureaus, manuscript writing or educational events	<input checked="" type="checkbox"/> None <table border="1"> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> </table>								
6	Payment for expert testimony	<input checked="" type="checkbox"/> None <table border="1"> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> </table>								
7	Support for attending meetings and/or travel	<input checked="" type="checkbox"/> None <table border="1"> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> </table>								
8	Patents planned, issued or pending	<input checked="" type="checkbox"/> None <table border="1"> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> </table>								
9	Participation on a Data Safety Monitoring Board or Advisory Board	<input checked="" type="checkbox"/> None <table border="1"> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> </table>								
10	Leadership or fiduciary role in other board, society, committee or	<input type="checkbox"/> None <table border="1"> <tr><td>Employee of Regeneron</td><td></td></tr> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> </table>	Employee of Regeneron							
Employee of Regeneron										

	advocacy group, paid or unpaid		
11	Stock or stock options	<input type="checkbox"/> None	
		Stockholder of Regeneron	
12	Receipt of equipment, materials, drugs, medical writing, gifts or other services	<input checked="" type="checkbox"/> None	
13	Other financial or non-financial interests	<input checked="" type="checkbox"/> None	
<p>Please place an "X" next to the following statement to indicate your agreement:</p> <p><input checked="" type="checkbox"/> I certify that I have answered every question and have not altered the wording of any of the questions on this form.</p>			

ICMJE DISCLOSURE FORM

Date: 12/10/2021

Your Name: David A. Williams, MD

Manuscript Title: Clonal Hematopoiesis in Sickle Cell Disease

Manuscript Number (if known): 156060-JCI-CMED-RV-2

In the interest of transparency, we ask you to disclose all relationships/activities/interests listed below that are related to the content of your manuscript. "Related" means any relation with for-profit or not-for-profit third parties whose interests may be affected by the content of the manuscript. Disclosure represents a commitment to transparency and does not necessarily indicate a bias. If you are in doubt about whether to list a relationship/activity/interest, it is preferable that you do so.

The author's relationships/activities/interests should be defined broadly. For example, if your manuscript pertains to the epidemiology of hypertension, you should declare all relationships with manufacturers of antihypertensive medication, even if that medication is not mentioned in the manuscript.

In item #1 below, report all support for the work reported in this manuscript without time limit. For all other items, the time frame for disclosure is the past 36 months.

	Name all entities with whom you have this relationship or indicate none (add rows as needed)	Specifications/Comments (e.g., if payments were made to you or to your institution)						
Time frame: Since the initial planning of the work								
1	All support for the present manuscript (e.g., funding, provision of study materials, medical writing, article processing charges, etc.) No time limit for this item.	<div style="margin-bottom: 10px;"><input checked="" type="checkbox"/> None</div> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr><td style="height: 20px;"></td><td style="height: 20px;"></td></tr> <tr><td style="height: 20px;"></td><td style="height: 20px;"></td></tr> <tr><td style="height: 20px;"></td><td style="height: 20px; text-align: center;">Click the tab key to add additional rows.</td></tr> </table>						Click the tab key to add additional rows.
	Click the tab key to add additional rows.							
Time frame: past 36 months								
2	Grants or contracts from any entity (if not indicated in item #1 above).	<div style="margin-bottom: 10px;"><input type="checkbox"/> None</div> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%;">Bluebird bio</td><td style="width: 50%;">Prior research funding for research in hemoglobinopathies</td></tr> <tr> <td>Orchard Therapeutics</td><td>For X-SCID; provided GMP vector for clinical trial. Potential for future royalty/milestone income</td></tr> <tr> <td style="height: 20px;"></td><td style="height: 20px;"></td></tr> </table>	Bluebird bio	Prior research funding for research in hemoglobinopathies	Orchard Therapeutics	For X-SCID; provided GMP vector for clinical trial. Potential for future royalty/milestone income		
Bluebird bio	Prior research funding for research in hemoglobinopathies							
Orchard Therapeutics	For X-SCID; provided GMP vector for clinical trial. Potential for future royalty/milestone income							

3	Royalties or licenses	<input type="checkbox"/> None <table border="1" data-bbox="391 205 1523 531"> <tr> <td data-bbox="391 205 963 457">Bluebird bio</td> <td data-bbox="963 205 1523 457">BCH licensed certain IP relevant to hemoglobinopathies to bluebird bio. The current license includes the potential for future royalty/milestone income. Bluebird has indicated they will not pursue this as a clinical program and BCH is negotiating return of IP. Received payment in past through BCH institutional licensing agreement.</td> </tr> <tr> <td data-bbox="391 457 963 489"></td> <td data-bbox="963 457 1523 489"></td> </tr> <tr> <td data-bbox="391 489 963 520"></td> <td data-bbox="963 489 1523 520"></td> </tr> </table>		Bluebird bio	BCH licensed certain IP relevant to hemoglobinopathies to bluebird bio. The current license includes the potential for future royalty/milestone income. Bluebird has indicated they will not pursue this as a clinical program and BCH is negotiating return of IP. Received payment in past through BCH institutional licensing agreement.						
Bluebird bio	BCH licensed certain IP relevant to hemoglobinopathies to bluebird bio. The current license includes the potential for future royalty/milestone income. Bluebird has indicated they will not pursue this as a clinical program and BCH is negotiating return of IP. Received payment in past through BCH institutional licensing agreement.										
4	Consulting fees	<input checked="" type="checkbox"/> None <table border="1" data-bbox="391 682 1523 821"> <tr><td data-bbox="391 682 963 714"></td><td data-bbox="963 682 1523 714"></td></tr> <tr><td data-bbox="391 714 963 745"></td><td data-bbox="963 714 1523 745"></td></tr> <tr><td data-bbox="391 745 963 777"></td><td data-bbox="963 745 1523 777"></td></tr> <tr><td data-bbox="391 777 963 808"></td><td data-bbox="963 777 1523 808"></td></tr> </table>									
5	Payment or honoraria for lectures, presentations, speakers bureaus, manuscript writing or educational events	<input checked="" type="checkbox"/> None <table border="1" data-bbox="391 974 1523 1077"> <tr><td data-bbox="391 974 963 1005"></td><td data-bbox="963 974 1523 1005"></td></tr> <tr><td data-bbox="391 1005 963 1037"></td><td data-bbox="963 1005 1523 1037"></td></tr> <tr><td data-bbox="391 1037 963 1068"></td><td data-bbox="963 1037 1523 1068"></td></tr> </table>									
6	Payment for expert testimony	<input checked="" type="checkbox"/> None <table border="1" data-bbox="391 1312 1523 1415"> <tr><td data-bbox="391 1312 963 1344"></td><td data-bbox="963 1312 1523 1344"></td></tr> <tr><td data-bbox="391 1344 963 1375"></td><td data-bbox="963 1344 1523 1375"></td></tr> <tr><td data-bbox="391 1375 963 1407"></td><td data-bbox="963 1375 1523 1407"></td></tr> </table>									
7	Support for attending meetings and/or travel	<input checked="" type="checkbox"/> None <table border="1" data-bbox="391 1570 1523 1673"> <tr><td data-bbox="391 1570 963 1602"></td><td data-bbox="963 1570 1523 1602"></td></tr> <tr><td data-bbox="391 1602 963 1633"></td><td data-bbox="963 1602 1523 1633"></td></tr> <tr><td data-bbox="391 1633 963 1665"></td><td data-bbox="963 1633 1523 1665"></td></tr> </table>									
8	Patents planned, issued or pending	<input checked="" type="checkbox"/> None <table border="1" data-bbox="391 1829 1523 1929"> <tr><td data-bbox="391 1829 963 1860"></td><td data-bbox="963 1829 1523 1860"></td></tr> <tr><td data-bbox="391 1860 963 1892"></td><td data-bbox="963 1860 1523 1892"></td></tr> <tr><td data-bbox="391 1892 963 1923"></td><td data-bbox="963 1892 1523 1923"></td></tr> </table>									

9	Participation on a Data Safety Monitoring Board or Advisory Board	<input type="checkbox"/> None <table border="1" data-bbox="391 205 1523 342"> <tr> <td>Geneception</td> <td>Scientific Advisory Board</td> </tr> <tr> <td>Biomarin</td> <td>Insertion Site Advisory Board</td> </tr> <tr> <td>Bluebird Bio</td> <td>Insertion Site Analysis Advisory Board</td> </tr> <tr> <td>Beam Therapeutics</td> <td>Scientific Advisory Board</td> </tr> </table>		Geneception	Scientific Advisory Board	Biomarin	Insertion Site Advisory Board	Bluebird Bio	Insertion Site Analysis Advisory Board	Beam Therapeutics	Scientific Advisory Board				
Geneception	Scientific Advisory Board														
Biomarin	Insertion Site Advisory Board														
Bluebird Bio	Insertion Site Analysis Advisory Board														
Beam Therapeutics	Scientific Advisory Board														
10	Leadership or fiduciary role in other board, society, committee or advocacy group, paid or unpaid	<input type="checkbox"/> None <table border="1" data-bbox="391 495 1523 827"> <tr> <td>Orchard Therapeutics</td> <td>Co-founder and SAB, Orchard Therapeutics; SAB position ended 5/20</td> </tr> <tr> <td>Novartis</td> <td>Steering Committee, Novartis ETB115E2201 (eltrombopeg in pediatric aplastic anemia). Advisory fees donated to NAPAAC</td> </tr> <tr> <td>Alerion Biosciences (now licensed to Avro Bio)</td> <td>Co-Founder, potential for future milestones/royalties</td> </tr> <tr> <td>Emerging Therapy Solutions</td> <td>Chief Scientific Chair</td> </tr> <tr> <td></td> <td></td> </tr> <tr> <td></td> <td></td> </tr> </table>		Orchard Therapeutics	Co-founder and SAB, Orchard Therapeutics; SAB position ended 5/20	Novartis	Steering Committee, Novartis ETB115E2201 (eltrombopeg in pediatric aplastic anemia). Advisory fees donated to NAPAAC	Alerion Biosciences (now licensed to Avro Bio)	Co-Founder, potential for future milestones/royalties	Emerging Therapy Solutions	Chief Scientific Chair				
Orchard Therapeutics	Co-founder and SAB, Orchard Therapeutics; SAB position ended 5/20														
Novartis	Steering Committee, Novartis ETB115E2201 (eltrombopeg in pediatric aplastic anemia). Advisory fees donated to NAPAAC														
Alerion Biosciences (now licensed to Avro Bio)	Co-Founder, potential for future milestones/royalties														
Emerging Therapy Solutions	Chief Scientific Chair														
11	Stock or stock options	<input checked="" type="checkbox"/> None <table border="1" data-bbox="391 980 1523 1083"> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> </table>													
12	Receipt of equipment, materials, drugs, medical writing, gifts or other services	<input type="checkbox"/> None <table border="1" data-bbox="391 1236 1523 1339"> <tr> <td>Bluebird Bio</td> <td>provided GMP vector for SCD clinical trial</td> </tr> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> </table>		Bluebird Bio	provided GMP vector for SCD clinical trial										
Bluebird Bio	provided GMP vector for SCD clinical trial														
13	Other financial or non-financial interests	<input checked="" type="checkbox"/> None <table border="1" data-bbox="391 1495 1523 1598"> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> </table>													

Please place an "X" next to the following statement to indicate your agreement:

☒ I certify that I have answered every question and have not altered the wording of any of the questions on this form.

ICMJE DISCLOSURE FORM

Date: 12/9/2021

Your Name: Pradeep Natarajan

Manuscript Title: Clonal Hematopoiesis in Sickle Cell Disease

Manuscript Number (if known): 156060-JCI-CMED-RV-2

In the interest of transparency, we ask you to disclose all relationships/activities/interests listed below that are related to the content of your manuscript. "Related" means any relation with for-profit or not-for-profit third parties whose interests may be affected by the content of the manuscript. Disclosure represents a commitment to transparency and does not necessarily indicate a bias. If you are in doubt about whether to list a relationship/activity/interest, it is preferable that you do so.

The author's relationships/activities/interests should be defined broadly. For example, if your manuscript pertains to the epidemiology of hypertension, you should declare all relationships with manufacturers of antihypertensive medication, even if that medication is not mentioned in the manuscript.

In item #1 below, report all support for the work reported in this manuscript without time limit. For all other items, the time frame for disclosure is the past 36 months.

	Name all entities with whom you have this relationship or indicate none (add rows as needed)	Specifications/Comments (e.g., if payments were made to you or to your institution)																		
Time frame: Since the initial planning of the work																				
1	All support for the present manuscript (e.g., funding, provision of study materials, medical writing, article processing charges, etc.) No time limit for this item.	<div style="margin-bottom: 10px;"> <input checked="" type="checkbox"/> None </div> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr><td style="height: 20px;"></td><td style="height: 20px;"></td></tr> <tr><td style="height: 20px;"></td><td style="height: 20px;"></td></tr> <tr><td style="height: 20px;"></td><td style="height: 20px;"></td></tr> </table> <div style="font-size: small; text-align: right; margin-top: 5px;">Click the tab key to add additional rows.</div>																		
Time frame: past 36 months																				
2	Grants or contracts from any entity (if not indicated in item #1 above).	<div style="margin-bottom: 10px;"> <input type="checkbox"/> None </div> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr><td style="height: 20px;">Amgen</td><td style="height: 20px;">Payments to institution</td></tr> <tr><td style="height: 20px;">NIH NIDDK</td><td style="height: 20px;">Payments to institution</td></tr> <tr><td style="height: 20px;">NIH NHLBI</td><td style="height: 20px;">Payments to institution</td></tr> <tr><td style="height: 20px;">Department of Energy</td><td style="height: 20px;">Payments to institution</td></tr> <tr><td style="height: 20px;">Fondation Leducq</td><td style="height: 20px;">Payments to institution</td></tr> <tr><td style="height: 20px;">AstraZeneca</td><td style="height: 20px;">Payments to institution</td></tr> <tr><td style="height: 20px;">Apple</td><td style="height: 20px;">Payments to institution</td></tr> <tr><td style="height: 20px;">Boston Scientific</td><td style="height: 20px;">Payments to institution</td></tr> <tr><td style="height: 20px;">Novartis</td><td style="height: 20px;">Payments to institution</td></tr> </table>	Amgen	Payments to institution	NIH NIDDK	Payments to institution	NIH NHLBI	Payments to institution	Department of Energy	Payments to institution	Fondation Leducq	Payments to institution	AstraZeneca	Payments to institution	Apple	Payments to institution	Boston Scientific	Payments to institution	Novartis	Payments to institution
Amgen	Payments to institution																			
NIH NIDDK	Payments to institution																			
NIH NHLBI	Payments to institution																			
Department of Energy	Payments to institution																			
Fondation Leducq	Payments to institution																			
AstraZeneca	Payments to institution																			
Apple	Payments to institution																			
Boston Scientific	Payments to institution																			
Novartis	Payments to institution																			

3	Royalties or licenses	<input checked="" type="checkbox"/> None <table border="1" data-bbox="370 205 1503 310"> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> </table>																	
4	Consulting fees	<input type="checkbox"/> None <table border="1" data-bbox="370 464 1503 737"> <tr><td>Apple</td><td>Payments made to me</td></tr> <tr><td>AstraZeneca</td><td>Payments made to me</td></tr> <tr><td>Black Stone Life Sciences</td><td>Payments made to me</td></tr> <tr><td>Genexwell</td><td>Payments made to me</td></tr> <tr><td>Foresite Labs</td><td>Payments made to me</td></tr> <tr><td>Novartis</td><td>Payments made to me</td></tr> <tr><td>Roche/Genentech</td><td>Payments made to me</td></tr> <tr><td>TenSixteen Bio</td><td>Payments made to me</td></tr> </table>		Apple	Payments made to me	AstraZeneca	Payments made to me	Black Stone Life Sciences	Payments made to me	Genexwell	Payments made to me	Foresite Labs	Payments made to me	Novartis	Payments made to me	Roche/Genentech	Payments made to me	TenSixteen Bio	Payments made to me
Apple	Payments made to me																		
AstraZeneca	Payments made to me																		
Black Stone Life Sciences	Payments made to me																		
Genexwell	Payments made to me																		
Foresite Labs	Payments made to me																		
Novartis	Payments made to me																		
Roche/Genentech	Payments made to me																		
TenSixteen Bio	Payments made to me																		
5	Payment or honoraria for lectures, presentations, speakers bureaus, manuscript writing or educational events	<input type="checkbox"/> None <table border="1" data-bbox="370 890 1503 1062"> <tr><td>Allelica</td><td>Payment made to me</td></tr> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> </table>		Allelica	Payment made to me														
Allelica	Payment made to me																		
6	Payment for expert testimony	<input checked="" type="checkbox"/> None <table border="1" data-bbox="370 1230 1503 1335"> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> </table>																	
7	Support for attending meetings and/or travel	<input checked="" type="checkbox"/> None <table border="1" data-bbox="370 1488 1503 1593"> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> </table>																	
8	Patents planned, issued or pending	<input checked="" type="checkbox"/> None <table border="1" data-bbox="370 1747 1503 1852"> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> </table>																	
9	Participation on a Data Safety	<input checked="" type="checkbox"/> None																	

	Monitoring Board or Advisory Board		
10	Leadership or fiduciary role in other board, society, committee or advocacy group, paid or unpaid	<input type="checkbox"/> None	
11	Stock or stock options	<input type="checkbox"/> None	
		TenSixteen Bio	
12	Receipt of equipment, materials, drugs, medical writing, gifts or other services	<input checked="" type="checkbox"/> None	
13	Other financial or non-financial interests	<input type="checkbox"/> None	
		Spouse employed by Vertex	

Please place an "X" next to the following statement to indicate your agreement:

☒ I certify that I have answered every question and have not altered the wording of any of the questions on this form.

ICMJE DISCLOSURE FORM

Date: 12/10/2021

Your Name: Alexander Bick

Manuscript Title: Clonal Hematopoiesis in Sickle Cell Disease

Manuscript Number (if known): 156060-JCI-CMED-RV-2

In the interest of transparency, we ask you to disclose all relationships/activities/interests listed below that are related to the content of your manuscript. "Related" means any relation with for-profit or not-for-profit third parties whose interests may be affected by the content of the manuscript. Disclosure represents a commitment to transparency and does not necessarily indicate a bias. If you are in doubt about whether to list a relationship/activity/interest, it is preferable that you do so.

The author's relationships/activities/interests should be defined broadly. For example, if your manuscript pertains to the epidemiology of hypertension, you should declare all relationships with manufacturers of antihypertensive medication, even if that medication is not mentioned in the manuscript.

In item #1 below, report all support for the work reported in this manuscript without time limit. For all other items, the time frame for disclosure is the past 36 months.

		Name all entities with whom you have this relationship or indicate none (add rows as needed)	Specifications/Comments (e.g., if payments were made to you or to your institution)						
Time frame: Since the initial planning of the work									
1	All support for the present manuscript (e.g., funding, provision of study materials, medical writing, article processing charges, etc.) No time limit for this item.	<div style="padding: 5px;"> <input checked="" type="checkbox"/> None </div> <table border="1" style="width: 100%; border-collapse: collapse; margin-top: 5px;"> <tr><td style="height: 20px;"></td><td style="height: 20px;"></td></tr> <tr><td style="height: 20px;"></td><td style="height: 20px;"></td></tr> <tr><td style="height: 20px;"></td><td style="height: 20px;"></td></tr> </table>							
Time frame: past 36 months									
2	Grants or contracts from any entity (if not indicated in item #1 above).	<div style="padding: 5px;"> <input checked="" type="checkbox"/> None </div> <table border="1" style="width: 100%; border-collapse: collapse; margin-top: 5px;"> <tr><td style="height: 20px;"></td><td style="height: 20px;"></td></tr> <tr><td style="height: 20px;"></td><td style="height: 20px;"></td></tr> <tr><td style="height: 20px;"></td><td style="height: 20px;"></td></tr> </table>							
3	Royalties or licenses	<div style="padding: 5px;"> <input checked="" type="checkbox"/> None </div> <table border="1" style="width: 100%; border-collapse: collapse; margin-top: 5px;"> <tr><td style="height: 20px;"></td><td style="height: 20px;"></td></tr> <tr><td style="height: 20px;"></td><td style="height: 20px;"></td></tr> <tr><td style="height: 20px;"></td><td style="height: 20px;"></td></tr> </table>							

4	Consulting fees	<input type="checkbox"/> None <table border="1" data-bbox="370 205 1507 342"> <tr> <td data-bbox="370 205 943 237">TenSixteen Bio</td> <td data-bbox="943 205 1507 237">To Me</td> </tr> <tr> <td data-bbox="370 237 943 268"></td> <td data-bbox="943 237 1507 268"></td> </tr> <tr> <td data-bbox="370 268 943 300"></td> <td data-bbox="943 268 1507 300"></td> </tr> <tr> <td data-bbox="370 300 943 342"></td> <td data-bbox="943 300 1507 342"></td> </tr> </table>		TenSixteen Bio	To Me						
TenSixteen Bio	To Me										
5	Payment or honoraria for lectures, presentations, speakers bureaus, manuscript writing or educational events	<input checked="" type="checkbox"/> None <table border="1" data-bbox="370 493 1507 596"> <tr> <td data-bbox="370 493 943 525"></td> <td data-bbox="943 493 1507 525"></td> </tr> <tr> <td data-bbox="370 525 943 556"></td> <td data-bbox="943 525 1507 556"></td> </tr> <tr> <td data-bbox="370 556 943 596"></td> <td data-bbox="943 556 1507 596"></td> </tr> </table>									
6	Payment for expert testimony	<input checked="" type="checkbox"/> None <table border="1" data-bbox="370 831 1507 934"> <tr> <td data-bbox="370 831 943 863"></td> <td data-bbox="943 831 1507 863"></td> </tr> <tr> <td data-bbox="370 863 943 894"></td> <td data-bbox="943 863 1507 894"></td> </tr> <tr> <td data-bbox="370 894 943 934"></td> <td data-bbox="943 894 1507 934"></td> </tr> </table>									
7	Support for attending meetings and/or travel	<input checked="" type="checkbox"/> None <table border="1" data-bbox="370 1089 1507 1192"> <tr> <td data-bbox="370 1089 943 1121"></td> <td data-bbox="943 1089 1507 1121"></td> </tr> <tr> <td data-bbox="370 1121 943 1152"></td> <td data-bbox="943 1121 1507 1152"></td> </tr> <tr> <td data-bbox="370 1152 943 1192"></td> <td data-bbox="943 1152 1507 1192"></td> </tr> </table>									
8	Patents planned, issued or pending	<input checked="" type="checkbox"/> None <table border="1" data-bbox="370 1346 1507 1449"> <tr> <td data-bbox="370 1346 943 1377"></td> <td data-bbox="943 1346 1507 1377"></td> </tr> <tr> <td data-bbox="370 1377 943 1409"></td> <td data-bbox="943 1377 1507 1409"></td> </tr> <tr> <td data-bbox="370 1409 943 1449"></td> <td data-bbox="943 1409 1507 1449"></td> </tr> </table>									
9	Participation on a Data Safety Monitoring Board or Advisory Board	<input checked="" type="checkbox"/> None <table border="1" data-bbox="370 1604 1507 1707"> <tr> <td data-bbox="370 1604 943 1635"></td> <td data-bbox="943 1604 1507 1635"></td> </tr> <tr> <td data-bbox="370 1635 943 1667"></td> <td data-bbox="943 1635 1507 1667"></td> </tr> <tr> <td data-bbox="370 1667 943 1707"></td> <td data-bbox="943 1667 1507 1707"></td> </tr> </table>									
10	Leadership or fiduciary role in other board, society, committee or	<input checked="" type="checkbox"/> None <table border="1" data-bbox="370 1862 1507 1965"> <tr> <td data-bbox="370 1862 943 1894"></td> <td data-bbox="943 1862 1507 1894"></td> </tr> <tr> <td data-bbox="370 1894 943 1925"></td> <td data-bbox="943 1894 1507 1925"></td> </tr> <tr> <td data-bbox="370 1925 943 1965"></td> <td data-bbox="943 1925 1507 1965"></td> </tr> </table>									

	advocacy group, paid or unpaid		
11	Stock or stock options	<input type="checkbox"/> None	
		TenSixteen Bio	To Me
12	Receipt of equipment, materials, drugs, medical writing, gifts or other services	<input checked="" type="checkbox"/> None	
13	Other financial or non-financial interests	<input checked="" type="checkbox"/> None	
<p>Please place an "X" next to the following statement to indicate your agreement:</p> <p><input checked="" type="checkbox"/> I certify that I have answered every question and have not altered the wording of any of the questions on this form.</p>			

ICMJE DISCLOSURE FORM

Date: 12/9/2021

Your Name: Vijay G. Sankaran

Manuscript Title: Clonal Hematopoiesis in Sickle Cell Disease

Manuscript Number (if known): 156060-JCI-CMED-RV-2

In the interest of transparency, we ask you to disclose all relationships/activities/interests listed below that are related to the content of your manuscript. "Related" means any relation with for-profit or not-for-profit third parties whose interests may be affected by the content of the manuscript. Disclosure represents a commitment to transparency and does not necessarily indicate a bias. If you are in doubt about whether to list a relationship/activity/interest, it is preferable that you do so.

The author's relationships/activities/interests should be defined broadly. For example, if your manuscript pertains to the epidemiology of hypertension, you should declare all relationships with manufacturers of antihypertensive medication, even if that medication is not mentioned in the manuscript.

In item #1 below, report all support for the work reported in this manuscript without time limit. For all other items, the time frame for disclosure is the past 36 months.

		Name all entities with whom you have this relationship or indicate none (add rows as needed)	Specifications/Comments (e.g., if payments were made to you or to your institution)						
Time frame: Since the initial planning of the work									
1	All support for the present manuscript (e.g., funding, provision of study materials, medical writing, article processing charges, etc.) No time limit for this item.	<div style="display: flex; align-items: flex-start;"> <div style="margin-right: 10px;"><input type="checkbox"/> None</div> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="padding: 2px 5px;">NIH grants R01 DK103794 and R01 HL146500</td> <td style="width: 150px;"></td> </tr> <tr> <td style="padding: 2px 5px;">New York Stem Cell Foundation</td> <td></td> </tr> <tr> <td style="padding: 2px 5px;"></td> <td></td> </tr> </table> </div>		NIH grants R01 DK103794 and R01 HL146500		New York Stem Cell Foundation			
NIH grants R01 DK103794 and R01 HL146500									
New York Stem Cell Foundation									
Time frame: past 36 months									
2	Grants or contracts from any entity (if not indicated in item #1 above).	<div style="display: flex; align-items: flex-start;"> <div style="margin-right: 10px;"><input checked="" type="checkbox"/> None</div> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr><td style="height: 20px;"></td><td></td></tr> <tr><td style="height: 20px;"></td><td></td></tr> <tr><td style="height: 20px;"></td><td></td></tr> </table> </div>							
3	Royalties or licenses	<div style="display: flex; align-items: flex-start;"> <div style="margin-right: 10px;"><input checked="" type="checkbox"/> None</div> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr><td style="height: 20px;"></td><td></td></tr> <tr><td style="height: 20px;"></td><td></td></tr> <tr><td style="height: 20px;"></td><td></td></tr> </table> </div>							

4	Consulting fees	<input type="checkbox"/> None <div> <div>V.G.S. serves as an advisor to Novartis, Forma, Cellarity, Ensoma, and Branch Biosciences, all unrelated to the present work.</div> <div></div> <div></div> <div></div> </div>	
5	Payment or honoraria for lectures, presentations, speakers bureaus, manuscript writing or educational events	<input checked="" type="checkbox"/> None <div> <div></div> <div></div> <div></div> </div>	
6	Payment for expert testimony	<input checked="" type="checkbox"/> None <div> <div></div> <div></div> <div></div> </div>	
7	Support for attending meetings and/or travel	<input checked="" type="checkbox"/> None <div> <div></div> <div></div> <div></div> </div>	
8	Patents planned, issued or pending	<input checked="" type="checkbox"/> None <div> <div></div> <div></div> <div></div> </div>	
9	Participation on a Data Safety Monitoring Board or Advisory Board	<input checked="" type="checkbox"/> None <div> <div></div> <div></div> <div></div> </div>	
10	Leadership or fiduciary role in other board, society,	<input checked="" type="checkbox"/> None <div> <div></div> </div>	

	committee or advocacy group, paid or unpaid		
11	Stock or stock options	<input checked="" type="checkbox"/> None	
12	Receipt of equipment, materials, drugs, medical writing, gifts or other services	<input checked="" type="checkbox"/> None	
13	Other financial or non-financial interests	<input checked="" type="checkbox"/> None	
<p>Please place an "X" next to the following statement to indicate your agreement:</p> <p><input checked="" type="checkbox"/> I certify that I have answered every question and have not altered the wording of any of the questions on this form.</p>			