SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

SCHEDULE 13G

Under the Securities and Exchange Act of 1934

Altimmune, Inc.

(Name of Issuer)

Common Stock (Title of Class of Securities)

02155H200 (CUSIP Number)

December 31, 2023 (Date of Event Which Requires Filing of this Statement)

Check the appropriate box to designate the rule pursuant to which this Schedule is filed:

This Schedule is filed pursuant to Rule 13d-1(b)

The information required in the remainder of this cover page (except any items to which the form provides a cross-reference) shall not be deemed to be "filed" for the purpose of Section 18 of the Securities Exchange Act of 1934 ("Act") or otherwise subject to the liabilities of that section of the Act but shall be subject to all other provisions of the Act.

1)	Name of Reporting Person			
	Ameriprise Financial, Inc.			
	C C or I D	C La	lentification No. of Above Person	
	IRS No. 1.			
2)			ropriate Box if a Member of a Group	
	(a) 🗆	(b)		
			escribes the reporting person's relationship with other persons, but the reporting person does not affirm the existence of a group.	
3)	SEC Use (Only		
4)	Citizenshi	n or I	Place of Organization	
, T)	Citizensinj	p or r	lace of Organization	
	Delaware			
	•	5)	Sole Voting Power	
	JMBER OF			
	SHARES	6)	Shared Voting Power	
BENEFICIALLY OWNED BY			4,183,439	
	EACH	7)	Sole Dispositive Power	
	EPORTING			
I	PERSON		0	
	WITH	8)	Shared Dispositive Power	
			4,183,682	
9)	Δ ggregate	Δmc	ount Beneficially Owned by Each Reporting Person	
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	4,183,682			
10)	Check if the	ne Ag	gregate Amount in Row (9) Excludes Certain Shares	
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11)	Not Applicable Not Applicable Not Applicable			
11)	Percent of Class Represented by Amount In Row (9)			
	7.79%			
12)	Type of Re	eporti	ng Person	
	HC			

1)	Name of Reporting Person			
	TAM UK International Holdings Limited			
2)			ropriate Box if a Member of a Group	
	(a) 🗆	(b)	$oxed{\boxtimes}^*$	
			lescribes the reporting person's relationship with other persons, but the reporting person does not affirm the existence of a group.	
3)	SEC Use (Only		
4)	Citizenship or Place of Organization			
	England a	nd W	ales	
		5)	Sole Voting Power	
NU	MBER OF		0	
	SHARES	6)	Shared Voting Power	
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OWNED BY EACH		7)	4,013,211 Sole Dispositive Power	
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F	PERSON		0	
	WITH	8)	Shared Dispositive Power	
			4,013,211	
9)	Aggregate	Amo	ount Beneficially Owned by Each Reporting Person	
	4,013,211			
10)		ne Ag	gregate Amount in Row (9) Excludes Certain Shares	
	Not Applie	aabla		
11)	Not Applicable Percent of Class Represented by Amount In Row (9)			
11)	1 creent of	Clus	represented by random in Now (7)	
	7.47%			
12)	Type of Re	eport	ing Person	
	FI			

1)	Name of Reporting Person				
	Threadneedle Holdings Limited				
2)			copriate Box if a Member of a Group		
2)	(a) \square	(b)			
	()	()			
			lescribes the reporting person's relationship with other persons, but the reporting person does not affirm the existence of a group.		
3)	SEC Use (Only			
4)	Citizenshii	n or F	Place of Organization		
.,		p 01 1			
	England a	nd Wa	ales		
		5)	Sole Voting Power		
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EACH		7)	Sole Dispositive Power		
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ŀ	PERSON WITH		0		
	W1111	8)	Shared Dispositive Power		
			4,013,211		
9)	Aggregate	Amo	ount Beneficially Owned by Each Reporting Person		
10)	4,013,211	A .	Annual Professional Control Characteristics		
10)	Check II tr	ne Ag	gregate Amount in Row (9) Excludes Certain Shares		
	Not Applie				
11)	Percent of	Class	s Represented by Amount In Row (9)		
	7.47%				
12)	Type of Re	enorti	ing Person		
/	.71.51.16	. I			
	FI				

1)	Name of Reporting Person				
	TAM UK Holdings Limited				
2)			ropriate Box if a Member of a Group		
2)	(a) □	(b)			
	· /	()			
			lescribes the reporting person's relationship with other persons, but the reporting person does not affirm the existence of a group.		
3)	SEC Use (Only			
4)	Citizenshi	p or I	Place of Organization		
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	England a				
		5)	Sole Voting Power		
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	SHARES	6)	Shared Voting Power		
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OWNED BY			4,013,211		
EACH REPORTING		7)	Sole Dispositive Power		
1	PERSON		0		
	WITH	8)	Shared Dispositive Power		
			1012.211		
0)	A 4 -	A	4,013,211		
9)	Aggregate	Amo	ount Beneficially Owned by Each Reporting Person		
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10)	Check if the	ne Ag	gregate Amount in Row (9) Excludes Certain Shares		
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11)	Not Applie		s Represented by Amount In Row (9)		
11)	1 cicciii 01	Cias	s represented by Amount in Row (7)		
	7.47%				
12)	Type of Re	eporti	ing Person		
	F74				
	FI				

1)	Name of Reporting Person			
	Threadneedle Asset Management Holdings Limited			
2)			ropriate Box if a Member of a Group	
	(a) □	(b)		
			lescribes the reporting person's relationship with other persons, but the reporting person does not affirm the existence of a group.	
3)	SEC Use (Only		
4)	Citizenshij	p or I	Place of Organization	
	England a	nd W	ales	
		5)	Sole Voting Power	
NU	MBER OF		0	
S	SHARES	6)	Shared Voting Power	
BENEFICIALLY			4.012.211	
01	WNED BY EACH	7)	4,013,211 Sole Dispositive Power	
RE	PORTING	''	Sole Dispositive I ower	
F	PERSON		0	
	WITH	8)	Shared Dispositive Power	
			4,013,211	
9)	Aggregate	Amo	ount Beneficially Owned by Each Reporting Person	
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10)	4,013,211 Check if the Aggregate Amount in Row (9) Excludes Certain Shares			
10)	Check ii u	ic Ag	gregate Amount in Row (9) Excludes Certain Shares	
	Not Applicable			
11)	Percent of	Clas	s Represented by Amount In Row (9)	
	7.47%			
12)	Type of Re	porti	ing Person	
,	J	•		
	FI			

1)	Name of Reporting Person			
	TC Financing Ltd			
2)				
	(a) 🗆	(0)		
			describes the reporting person's relationship with other persons, but the reporting person does not affirm the existence of a group.	
3)	SEC Use Only			
4)	Citizenshij	p or I	Place of Organization	
	England a	nd W	fales	
		5)	Sole Voting Power	
NI	JMBER OF		0	
5	SHARES	6)	Shared Voting Power	
	EFICIALLY WNED BY		4,013,211	
	EACH	7)	Sole Dispositive Power	
	EPORTING PERSON			
WITH		8)	Shared Dispositive Power	
			4,013,211	
9)	Aggregate	Amo	bunt Beneficially Owned by Each Reporting Person	
	4,013,211			
10)	Check if the	ne Ag	ggregate Amount in Row (9) Excludes Certain Shares	
	Not Applicable			
11)			s Represented by Amount In Row (9)	
	7.47%			
12)	Type of Re	eport	ing Person	
	FI			
	11			

00011				
1)	Name of Reporting Person			
	Threadnee	dle A	Asset Management Limited	
2)	2) Check the Appropriate Box if a Member of a Group			
	(a) □	(b)	$oldsymbol{eta}^*$	
			describes the reporting person's relationship with other persons, but the reporting person does not affirm the existence of a group.	
3)	SEC Use Only			
4)	Citizenshij	p or I	Place of Organization	
	England a	nd W	ales	
		5)	Sole Voting Power	
NI.	JMBER OF		0	
5	SHARES	6)	Shared Voting Power	
1	EFICIALLY WNED BY		4,013,211	
	EACH	7)	Sole Dispositive Power	
1	EPORTING PERSON			
	WITH	8)	Shared Dispositive Power	
			4,013,211	
9)	Aggregate	Amo	ount Beneficially Owned by Each Reporting Person	
	4,013,211			
10)		ne Ag	agregate Amount in Row (9) Excludes Certain Shares	
11)	Not Applicable 1) Percent of Class Represented by Amount In Row (9)			
11)		Cias	s represented by Ambant in Row (7)	
10)	7.47%			
12)	Type of Re	eport	ing Person	
	FI			

1)	Name of Reporting Person			
	Threadneedle Investment Services Limited			
2)			ropriate Box if a Member of a Group	
	(a) 🗆	(b)	X*	
			describes the reporting person's relationship with other persons, but the reporting person does not affirm the existence of a group.	
3)	SEC Use (Only		
4)	Citizenshij	p or I	Place of Organization	
	England a	nd W	ales	
		5)	Sole Voting Power	
NU	MBER OF		0	
S	SHARES	6)	Shared Voting Power	
	EFICIALLY VNED BY		4,013,211	
	EACH	7)	Sole Dispositive Power	
	PORTING			
ŀ	PERSON WITH	0)		
	*******	8)	Shared Dispositive Power	
			4,013,211	
9)	Aggregate	Amo	ount Beneficially Owned by Each Reporting Person	
	4,013,211			
10)		ne Ag	ggregate Amount in Row (9) Excludes Certain Shares	
	Not Applic	rable		
11)			s Represented by Amount In Row (9)	
12)	7.47%		in a Damasu	
12)	Type of Re	port	ing Person	
	FI			

1(a) Name of Issuer: Altimmune, Inc. Address of Issuer's Principal 910 Clopper Road, Suite 201S Executive Offices: Gaithersburg, Maryland 20878 2(a) Name of Person Filing: (a) Ameriprise Financial, Inc. ("AFI") (b) TAM UK International Holdings Limited ("TAMUKI") (c) Threadneedle Holdings Limited ("THL") (d) TAM UK Holdings Limited ("TUHL") (e) Threadneedle Asset Management Holdings Limited ("TAMHL") (f) TC Financing Ltd ("TCFL") (g) Threadneedle Asset Management Limited ("TAML") (h) Threadneedle Investment Services Limited ("TISL") Persons (a) through (h) are sometimes referred to herein as the "Ameriprise Entities". 2(b) Address of Principal Business Office: (a) Ameriprise Financial, Inc. 145 Ameriprise Financial Center Minneapolis, MN 55474 (b) Cannon Place, 78 Cannon Street, London, EC4N 6AG (c) Cannon Place, 78 Cannon Street, London, EC4N 6AG (d) Cannon Place, 78 Cannon Street, London, EC4N 6AG (e) Cannon Place, 78 Cannon Street, London, EC4N 6AG (f) Cannon Place, 78 Cannon Street, London, EC4N 6AG (g) Cannon Place, 78 Cannon Street, London, EC4N 6AG (h) Cannon Place, 78 Cannon Street, London, EC4N 6AG 2(c) Citizenship: (a) Delaware (b) England and Wales (c) England and Wales (d) England and Wales (e) England and Wales (f) England and Wales (g) England and Wales (h) England and Wales

Information if statement is filed pursuant to Rules 13d-1(b) or 13d-2(b): (a) Ameriprise Financial, Inc. A parent holding company in accordance with Rule 13d-1(b)(1)(ii)(G). (Note: See Item 7) (b) TAM UK International Holdings Limited A non-U.S. institution in accordance with Rule 13d-1(b)(1)(ii)(J). (c) Threadneedle Holdings Limited A non-U.S. institution in accordance with Rule 13d-1(b)(1)(ii)(J). (d) TAM UK Holdings Limited A non-U.S. institution in accordance with Rule 13d-1(b)(1)(ii)(J). (e) Threadneedle Asset Management Holdings Limited A non-U.S. institution in accordance with Rule 13d-1(b)(1)(ii)(J). (f) TC Financing Ltd A non-U.S. institution in accordance with Rule 13d-1(b)(1)(ii)(J). (g) Threadneedle Asset Management Limited A non-U.S. institution in accordance with Rule 13d-1(b)(1)(ii)(J). (h) Threadneedle Investment Services Limited A non-U.S. institution in accordance with Rule 13d-1(b)(1)(ii)(J).

Common Stock

02155H200

2(d) Title of Class of Securities:

Cusip Number:

4 Incorporated by reference to Items (5)-(9) and (11) of the cover page pertaining to each reporting person.

AFI, as the parent company of the other Ameriprise Entities, may be deemed to beneficially own the shares reported herein by those reporting persons. Accordingly, the shares reported herein by AFI include those shares separately reported herein by those reporting persons.

Each of the Ameriprise Entities disclaims beneficial ownership of any shares reported on this Schedule.

- 5 Ownership of 5% or Less of a Class: Not Applicable
- 6 Ownership of more than 5% on Behalf of Another Person: Not Applicable
- 7 Identification and Classification of the Subsidiaries Which Acquired the Security Being Reported on by the Parent Holding Company:

AFI: See Exhibit I

8 Identification and Classification of Members of the Group:

Not Applicable

9 Notice of Dissolution of Group:

Not Applicable

10 Certification:

By signing below, I certify that, to the best of my knowledge and belief, the securities referred to above were acquired in the ordinary course of business and were not acquired for the purpose of and do not have the effect of changing or influencing the control of the issuer of such securities and were not acquired in connection with or as a participant in any transaction having such purposes or effect.

Signature

After reasonable inquiry and to the best of my knowledge and belief, I certify that the information set forth in this statement is true, complete and correct.

Dated: February 14, 2024

Ameriprise Financial, Inc.

By: /s/ Michael G. Clarke

Name: Michael G. Clarke

Title: Senior Vice President, North America Head of

Operations & Investor Services

TAM UK International Holdings Limited
Threadneedle Holdings Limited
TAM UK Holdings Limited
Threadneedle Asset Management Holdings Limited
TC Financing Ltd
Threadneedle Asset Management Limited
Threadneedle Investment Services Limited

By Columbia Management Investment Advisers, LLC, as Attorney in Fact

By: /s/ Michael G. Clarke

Name: Michael G. Clarke

Title: Senior Vice President, North America Head of

Operations & Investor Services By Columbia Management Investment Advisers, LLC, as Attorney in Fact

Contact Information Dominic Geddes Global Head of Reporting Global Operations and Investor Services Telephone: +442074645779

Exhibit Index

Exhibit I Identification and Classification of the Subsidiaries which Acquired the Security Being Reported on by the Parent Holding Company.

Exhibit II Joint Filing Agreement

Exhibit III Powers of Attorney

Exhibit I

to

Schedule 13G

Ameriprise Financial, Inc., a Delaware Corporation, is a parent holding company. The classification and identity of the relevant subsidiaries is as follows:

Non-US Institution – TAM UK International Holdings Limited, a private limited company incorporated in England and Wales, is a holding company and parent entity to Threadneedle Holdings Limited.

Non-US Institution – Threadneedle Holdings Limited, a private limited company incorporated in England and Wales, is a holding company and is the parent entity to TAM UK Holdings Limited.

Non-US Institution – TAM UK Holdings Limited, a private limited company incorporated in England and Wales, is a holding company and is the parent entity to Threadneedle Asset Management Holdings Limited.

Non-US Institution – Threadneedle Asset Management Holdings Limited, a private limited company incorporated in England and Wales, is a holding company and is the parent entity to TC Financing Limited.

Non-US Institution – TC Financing Limited, a private limited company incorporated in England and Wales, is a holding company and is the parent entity to Threadneedle Asset Management Limited.

Non-US Institution – Threadneedle Asset Management Limited, a private limited company incorporated in England and Wales, is an investment adviser authorized and regulated by the UK Financial Conduct Authority.

Non-US Institution – Threadneedle Investment Services Limited, a private limited company incorporated in England and Wales, is a management company authorized and regulated by the U.K. Financial Conduct Authority.

Exhibit II

to

Schedule 13G

Joint Filing Agreement

The undersigned persons agree and consent to the joint filing on their behalf of this Schedule 13G dated February 14, 2024 in connection with their beneficial ownership of Altimmune, Inc. Each of TAM UK International Holdings Limited, Threadneedle Holdings Limited, TAM UK Holdings Limited, Threadneedle Asset Management Limited and Threadneedle Investment Services Limited authorizes Ameriprise Financial, Inc. to execute the Schedule 13G to which this Exhibit is attached and make any necessary amendments thereto.

Ameriprise Financial, Inc.

By: /s/ Michael G. Clarke

Name: Michael G. Clarke

Title: Senior Vice President, North America Head of

Operations & Investor Services

TAM UK International Holdings Limited
Threadneedle Holdings Limited
TAM UK Holdings Limited
Threadneedle Asset Management Holdings Limited
TC Financing Ltd
Threadneedle Asset Management Limited
Threadneedle Investment Services Limited

By Columbia Management Investment Advisers, LLC, as Attorney in Fact

By: /s/ Michael G. Clarke

Name: Michael G. Clarke

Title: Senior Vice President, North America Head of

Operations & Investor Services

Exhibit III

to

Schedule 13G

Powers of Attorney

LIMITED POWER OF ATTORNEY

KNOW ALL MEN BY THESE PRESENTS, which are intended to constitute a Limited Power of Attorney, that TAM UK International Holdings Limited, a company incorporated under the laws of England and Wales under registered number 12728685, with its principal place of business at Cannon Place, 78 Cannon Street, London, EC4N 6AG ("Threadneedle"), does hereby constitute and appoint Columbia Management Investment Advisers, LLC ("CMIA"), a Minnesota limited liability company with its principal office at 225 Franklin Street, Boston, MA 02110, as its true and lawful agent and attorney-in-fact with full power of substitution and revocation and with the power to execute and file with the appropriate governmental agencies within the United States, for and on behalf of Threadneedle, substantial shareholding reports, amendments to substantial shareholding reports, corrections thereto and other documents ancillary to such reports as required by applicable laws and regulations (the "Reports") and to do any and all acts that said agent and attorney-in-fact deems necessary or appropriate in order to file such Reports.

This Limited Power of Attorney shall remain in effect until revoked in writing by Threadneedle.

IN WITNESS WHEREOF, this power of attorney was made as of this 9th day of December, 2020, by the undersigned as authorized representative of Threadneedle.

For and on behalf of TAM UK International Holdings Limited

By: /s/ Nick Ring

Name: Nick Ring Title: Director

KNOW ALL MEN BY THESE PRESENTS, which are intended to constitute a Limited Power of Attorney, that Threadneedle Holdings Limited, a limited liability company incorporated under the laws of England and Wales under registered number 07398893, with its principal place of business at Cannon Place, 78 Cannon Street, London, EC4N 6AG ("Threadneedle"), does hereby constitute and appoint Columbia Management Investment Advisers, LLC ("CMIA"), a Minnesota limited liability company with its principal office at 225 Franklin Street, Boston, MA 02110, as its true and lawful agent and attorney-in-fact with full power of substitution and revocation and with the power to execute and file with the appropriate governmental agencies within the United States, for and on behalf of Threadneedle, substantial shareholding reports, amendments to substantial shareholding reports, corrections thereto and other documents ancillary to such reports as required by applicable laws and regulations (the "Reports") and to do any and all acts that said agent and attorney-in-fact deems necessary or appropriate in order to file such Reports.

This Limited Power of Attorney shall remain in effect until revoked in writing by Threadneedle.

IN WITNESS WHEREOF, this power of attorney was made as of this 18 day of December, 2019, by the undersigned as authorized representative of Threadneedle.

For and on behalf of Threadneedle Holdings Limited

By: /s/ Peter Stone

Name: Peter Stone Title: Director

KNOW ALL MEN BY THESE PRESENTS, which are intended to constitute a Limited Power of Attorney, that TAM UK Holdings Limited a company incorporated under the laws of England and Wales under registered number 06779814, with its principal place of business at Cannon Place, 78 Cannon Street, London, EC4N 6AG ("Threadneedle"), does hereby constitute and appoint Columbia Management Investment Advisers, LLC ("CMIA"), a Minnesota limited liability company with its principal office at 225 Franklin Street, Boston, MA 02110, as its true and lawful agent and attorney-in-fact with full power of substitution and revocation and with the power to execute and file with the appropriate governmental agencies within the United States, for and on behalf of Threadneedle, substantial shareholding reports, amendments to substantial shareholding reports, corrections thereto and other documents ancillary to such reports as required by applicable laws and regulations (the "Reports") and to do any and all acts that said agent and attorney-in-fact deems necessary or appropriate in order to file such Reports.

This Limited Power of Attorney shall remain in effect until revoked in writing by Threadneedle.

IN WITNESS WHEREOF, this power of attorney was made as of this 18 day of December, 2019, by the undersigned as authorized representative of Threadneedle.

For and on behalf of TAM UK Holdings Limited

By: /s/ Peter Stone
Name: Peter Stone

Title: Director

KNOW ALL MEN BY THESE PRESENTS, which are intended to constitute a Limited Power of Attorney, that Threadneedle Asset Management Holdings Limited, a company incorporated under the laws of England and Wales under registered number 03554212, with its principal place of business at Cannon Place, 78 Cannon Street, London, EC4N 6AG ("Threadneedle"), does hereby constitute and appoint Columbia Management Investment Advisers, LLC ("CMIA"), a Minnesota limited liability company with its principal office at 225 Franklin Street, Boston, MA 02110, as its true and lawful agent and attorney-in-fact with full power of substitution and revocation and with the power to execute and file with the appropriate governmental agencies within the United States, for and on behalf of Threadneedle, substantial shareholding reports, amendments to substantial shareholding reports, corrections thereto and other documents ancillary to such reports as required by applicable laws and regulations (the "Reports") and to do any and all acts that said agent and attorney-in-fact deems necessary or appropriate in order to file such Reports.

This Limited Power of Attorney shall remain in effect until revoked in writing by Threadneedle.

IN WITNESS WHEREOF, this power of attorney was made as of this 18 day of December, 2019, by the undersigned as authorized representative of Threadneedle.

For and on behalf of Threadneedle Asset Management Holdings Limited

By: /s/ Peter Stone

Name: Peter Stone Title: Director

KNOW ALL MEN BY THESE PRESENTS, which are intended to constitute a Limited Power of Attorney, that TC Financing Limited a company incorporated under the laws of England and Wales under registered number 07466657, with its principal place of business at Cannon Place, 78 Cannon Street, London, EC4N 6AG ("Threadneedle"), does hereby constitute and appoint Columbia Management Investment Advisers, LLC ("CMIA"), a Minnesota limited liability company with its principal office at 225 Franklin Street, Boston, MA 02110, as its true and lawful agent and attorney-in-fact with full power of substitution and revocation and with the power to execute and file with the appropriate governmental agencies within the United States, for and on behalf of Threadneedle, substantial shareholding reports, amendments to substantial shareholding reports, corrections thereto and other documents ancillary to such reports as required by applicable laws and regulations (the "Reports") and to do any and all acts that said agent and attorney-in-fact deems necessary or appropriate in order to file such Reports.

This Limited Power of Attorney shall remain in effect until revoked in writing by Threadneedle.

IN WITNESS WHEREOF, this power of attorney was made as of this 18 day December, 2019, by the undersigned as authorized representative of Threadneedle.

For and on behalf of TC Financing Limited

By: /s/ Peter Stone
Name: Peter Stone
Title: Director

KNOW ALL MEN BY THESE PRESENTS, which are intended to constitute a Limited Power of Attorney, that Threadneedle Asset Management Limited, a company incorporated under the laws of England and Wales under registered number 00573204, with its principal place of business at Cannon Place, 78 Cannon Street, London, EC4N 6AG ("Threadneedle"), does hereby constitute and appoint Columbia Management Investment Advisers, LLC ("CMIA"), a Minnesota limited liability company with its principal office at 225 Franklin Street, Boston, MA 02110, as its true and lawful agent and attorney-in-fact with full power of substitution and revocation and with the power to execute and file with the appropriate governmental agencies within the United States, for and on behalf of Threadneedle, substantial shareholding reports, amendments to substantial shareholding reports, corrections thereto and other documents ancillary to such reports as required by applicable laws and regulations (the "Reports") and to do any and all acts that said agent and attorney-in-fact deems necessary or appropriate in order to file such Reports.

This Limited Power of Attorney shall remain in effect until revoked in writing by Threadneedle.

IN WITNESS WHEREOF, this power of attorney was made as of this 18 day of December, 2019, by the undersigned as authorized representative of Threadneedle.

For and on behalf of Threadneedle Asset Management Limited

By: /s/ Peter Stone

Name: Peter Stone Title: Director

KNOW ALL MEN BY THESE PRESENTS, which are intended to constitute a Limited Power of Attorney, that Threadneedle Investment Services Limited, a company incorporated under the laws of England and Wales under registered number 3701768, with its principal place of business at Cannon Place, 78 Cannon Street, London, EC4N 6AG ("Threadneedle"), does hereby constitute and appoint Columbia Management Investment Advisers, LLC ("CMIA"), a Minnesota limited liability company with its principal office at 225 Franklin Street, Boston, MA 02110, as its true and lawful agent and attorney-in-fact with full power of substitution and revocation and with the power to execute and file with the appropriate governmental agencies within the United States, for and on behalf of Threadneedle, substantial shareholding reports, amendments to substantial shareholding reports, corrections thereto and other documents ancillary to such reports as required by applicable laws and regulations (the "Reports") and to do any and all acts that said agent and attorney-in-fact deems necessary or appropriate in order to file such Reports.

This Limited Power of Attorney shall remain in effect until revoked in writing by Threadneedle.

IN WITNESS WHEREOF, this power of attorney was made as of this 11 day of December, 2019, by the undersigned as authorized representative of Threadneedle.

For and on behalf of Threadneedle Investment Services Limited

By: /s/ Peter Stone

Name: Peter Stone Title: Director