Independent Assurance Statement to Vertex Pharmaceuticals Inc.

ERM Certification and Verification Services, Inc. ("ERM CVS") was engaged by Vertex Pharmaceuticals Incorporated ("Vertex") to provide assurance in relation to the information set out below and presented in the 2022 CDP Climate Change Questionnaire ("the Questionnaire").

Engagement summary		
Scope of our assurance engagement	Whether the 2021 information and data for the following selected indicators are fairly presented, in all material respects, with the reporting criteria:	
	 Total Scope 1 GHG Emissions (from direct energy use) [metric tonnes CO2e] Total Scope 2 GHG Emissions (location- and market-based methodologies) [metric tonnes CO2e] 	
	Total Scope 1 and Scope 2 GHG (market-based) emissions [metric tonnes CO2e]	
Reporting period	The data covered by the assurance will relate to year ending 31 December 2021.	
Reporting criteria	WBCSD/WRI GHG Protocol (2004, as updated January 2015) for the Scope 1 and Scope 2 GHG emissions. Vertex's internal reporting criteria and definitions.	
Assurance standard	ERM CVS' assurance methodology, based on the International Standard on Assurance Engagements ISAE 3000 (Revised).	
Assurance level	Limited assurance.	
Respective responsibilities	Vertex is responsible for preparing the Questionnaire and for the collection and presentation of the information within it.	
	ERM CVS' responsibility is to provide conclusions on the agreed scope based on the assurance activities performed and exercising our professional judgement.	

Our conclusions

Based on our activities, as described below, nothing has come to our attention to indicate that the 2021 data and information for the selected GHG emissions as shown below and reported in Vertex's 2022 CDP Climate Change Questionnaire are not fairly presented, in all material respects, with the reporting criteria.

Total Scope 1 GHG emissions:	6,128 MTCO ₂ e
Total Scope 2 GHG (location-based) emissions:	10,957 MTCO ₂ e
Total Scope 2 GHG (market-based) emissions:	7,159 MTCO ₂ e
Total Scope 1 & Scope 2 (market-based) GHG emissions:	13,287 MTCO ₂ e

Our assurance activities

A multi-disciplinary team of sustainability and assurance specialists performed a range of assurance procedures which varied across the disclosures covered by our assurance engagement, as follows:

- Interviews with relevant staff to understand and evaluate the relevant management systems and processes (including internal review processes) used for collecting and reporting the selected metrics.
- An in-person visit to Vertex's HQ in Boston, MA to conduct interviews with data owners and for review of data consolidation and emissions calculation process, outcomes of Vertex's own internal QA/QC procedure, and check on completeness of data.
- Virtual site visits with Vertex's Providence (US) and Milton Park (UK) to review local reporting processes
 and consistency of reported annual data with selected underlying source data for each indicator. We
 interviewed relevant staff, reviewed site data capture and reporting methods, checked calculations and
 assessed the local internal quality control and quality assurance processes.
- An analytical review of the year end data submitted by all locations included in the consolidated 2021 group data for the selected disclosures which included testing the completeness and mathematical accuracy of data.
- Confirming conversion factors and assumptions used.
- Reviewing the presentation of information relevant to the scope of our work in the Questionnaire to ensure consistency with our findings.

The limitations of our engagement

The reliability of the assured information is subject to inherent uncertainties, given the available methods for determining, calculating or estimating the underlying information. It is important to understand our assurance conclusions in this context.

Our independence

Beth C.B. myle

ERM CVS is a member of the ERM Group. The work that ERM CVS conducts for clients is solely related to independent assurance activities and auditor training. Our processes are designed and implemented to ensure that the work we undertake with clients is free from bias and conflict of interest. ERM CVS and the staff that have undertaken work on this assurance exercise provide no consultancy related services to Vertex Pharmaceuticals Inc. in any respect.

Beth Wyke

Head of Corporate Assurance Services, Inc.

Malvern, PA

26 July 2022

ERM Certification and Verification Services, Inc. www.ermcvs.com Email: post@ermcvs.com



Independent Assurance Statement to Vertex Pharmaceuticals Inc.

ERM Certification and Verification Services, Inc. ("ERM CVS") was engaged by Vertex Pharmaceuticals Inc. ("Vertex") to provide assurance in relation to the information set out below and presented in the Vertex's 2021 Corporate Responsibility Report ("the Report").

Engagement summary		
Scope of our assurance engagement	Whether the 2021 information and data for the following selected indicators are fairly presented, in all material respects, with the reporting criteria:	
	Waste: Non-hazardous waste [tons] Non-hazardous waste diverted from landfill (through recycling or composting) [tons] Non-hazardous waste recycled or composted [%] Waste diverted from landfill [tons] Hazardous waste [tons] Laboratory and manufacturing waste recycled (waste generated from laboratory and manufacturing operations sent for recycling) [tons]	
Reporting period	The data covered by the assurance will relate to year ending 31 December 2021.	
Reporting criteria	Vertex's internal reporting criteria and definitions	
Assurance standard	ERM CVS' assurance methodology, based on the International Standard on Assurance Engagements ISAE 3000 (Revised).	
Assurance level	Limited assurance.	
Respective responsibilities	Vertex is responsible for preparing the Report and for the collection and presentation of the information within it. ERM CVS' responsibility is to provide conclusions on the agreed scope based on the assurance activities	
	performed and exercising our professional judgement.	

Our Conclusions

Based on our activities, as described below, nothing has come to our attention to indicate that the 2021 data and information for the disclosures listed under 'Scope' above are not fairly presented, in all material respects, with the reporting criteria.

Our assurance activities

A multi-disciplinary team of sustainability and assurance specialists performed a range of assurance procedures, as follows:

- Interviews with relevant staff to understand and evaluate the relevant management systems and processes (including internal review processes) used for collecting and reporting the selected waste metrics.
- An in-person visit to Vertex's HQ in Boston, MA to conduct interviews with data owners and for review of data consolidation, waste calculation processes, outcomes of Vertex's own internal QA/QC procedures, and check on completeness of data.
- Virtual visits with Vertex's Providence (US) and Milton Park (UK) sites to review local reporting processes and test the consistency of reported
 annual data with the underlying waste sources. We interviewed relevant staff, reviewed site data capture and reporting methods, checked
 calculations, and assessed the local internal quality control and quality assurance processes.
- . Desk-based review of source data for the top contributing sites to each key corporate waste metric including a sample of invoices.
- An analytical review of the consolidated year end data for each metric.
- A review of conversion factors and their use in calculations.
- Review the presentation of information relevant to the scope of our work in the Report to ensure consistency with our findings.

The limitations of our engagement

The reliability of the assured information is subject to inherent uncertainties, given the available methods for determining, calculating or estimating the underlying information. It is important to understand our assurance conclusions in this context.

Our independence

ERM CVS is a member of the ERM Group. The work that ERM CVS conducts for clients is solely related to independent assurance activities and auditor training. Our processes are designed and implemented to ensure that the work we undertake with clients is free from bias and conflict of interest. ERM CVS and the staff that have undertaken work on this assurance exercise provide no consultancy related services to Vertex Pharmaceuticals Inc. in any respect.

Our Observations

Beth C.B. myle

We have provided Vertex with a separate management report with our detailed (non-material) findings and recommendations. Without affecting the conclusions presented above, we have the following key observation:

Vertex should update its waste definition to capture all relevant waste streams, and clearly articulate this definition to each facility.

Beth Wyke

Head of Corporate Assurance Services, Inc.

Malvern, PA

7 June 2022

ERM Certification and Verification Services, Inc. www.ermcvs.com Email: post@ermcvs.com

