P.5.4 BATCH ANALYSIS

The batch analyses of commercial-scale drug product batches manufactured are described herein.

Batch information (Batch No., Place of Manufacture, Date of Manufacture, Batch Size, Manufacturing Process, Use of Batch) is presented in Section 1.

Batch analyses data (data obtained from release testing) is presented in Section 2.

No significant changes have been made to the methods throughout product development.

1. BATCHES TESTED

The manufactured drug product batches are categorized according to their intended use in the tables below.

Table 1: Commercial-Scale Batches of Drug Product

Batch No.	Place of Manufacture	Date of Manufacture	Batch Size (kg)	Manufacturing Process	Use of Batch
33445	Facility 8	15/8/2021	50	Process 1.0	PPQ / Stability
33446		19/8/2021	55	Process 1.0	PPQ / Stability
33447		24/9/2021	38	Process 1.0	PPQ / Stability

Facility 8 is located at Smolecule Pharma, Birmingham, AL, USA.

2. BATCH ANALYSIS DATA (TABULATED)

Batch analyses data (in tabular format) is presented herein.

Table 2: Batch Results for DrugProductnib (Commercial-Scale Batches)

Test procedure	Method	Acceptance criteria	33445	33446	33447
Description	Visual inspection	An orange film-coated tablet, debossed with 175 on one side	Complies	Complies	Complies
Identification	UHPLC	Consistent with the retention time and UV spectrum of the reference standard	Complies	Complies	Complies
Assay	UHPLC	95% to 105% of label claim	103	102	101
Impurity 1	UHPLC	NMT 0.2% w/w	0.1	0.2	0.2
Impurity 2	UHPLC	NMT 0.3% w/w	0.2	0.2	0.2
Impurity 3	UHPLC	NMT 0.3% w/w	0.2	0.2	0.1
Individual unspecified degradation products	UHPLC	NMT 0.2% w/w	0.1	0.1	0.1
Total degradation products	UHPLC	NMT 1.4% w/w	0.6	0.7	0.6
Nitrosamine[1]	LC-HRAMS	1500 ng/day	100	100	100
Polymorph B[2]	X-Ray Diffraction	NMT 1.0%	0.01	0.01	0.03
Dissolution	Apparatus 2 (paddles), UV measurement	Shall comply with the requirements of the harmonised USP/JP/Ph Eur	Complies	Complies	Complies
Dissolution		Q=80% at 30 minutes	90	92	95
Uniformity of dosage units[a]	Weight variation	Shall comply with the requirements of the harmonised USP/JP/Ph Eur	Complies	Complies	Complies
Microbiological quality	Ph Eur	Shall comply with the requirements of the Ph Eur	Complies	Complies	Complies
Water Content	USP/EP	NMT 1.0%	0.5	0.5	0.5

[1] Nitrosamine was included in the release specification throughout clinical development, and no longer forms a part of a commercial release specification; see Section P.5.6 Justification of Specification and Section P.3.5 Validation (PPQ) for additional data

[2] Polymorph B was included in the release specification throughout clinical development, and no longer forms a part of the commercial release specification; See Section P.5.6 Justification of Specification for data and rationale.