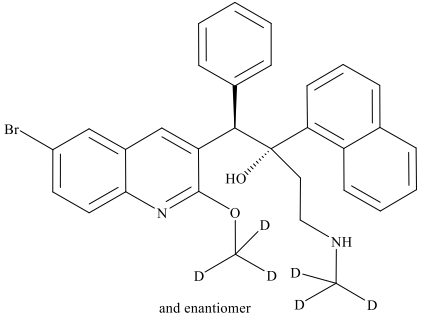


# Certificate of Analysis

Certificate No.: 20200707004

Date: July 7, 2020

Retest date: July 6, 2023

<b>Compound Name:</b>	<b>Bedaquiline Impurity 2-d<sub>6</sub></b>	
<b>Synonyms:</b>	<i>rel</i> -(1R,2R)-1-(6-bromo-2-(methoxy-d <sub>3</sub> )quinolin-3-yl)-4-((methyl-d <sub>3</sub> )amino)-2-(naphthalen-1-yl)-1-phenylbutan-2-ol	
<b>TLC Catalogue Number:</b>	B-101008	
<b>CAS Number:</b>	654654-75-8 (non-labelled)	
<b>Molecular Weight:</b>	547.53	
<b>Molecular Formula:</b>	C <sub>31</sub> H <sub>23</sub> D <sub>6</sub> BrN <sub>2</sub> O <sub>2</sub>	
<b>Source:</b>	TLC Pharmaceutical Standards	
<b>Source Lot No.:</b>	3893-098A4	
<b>Storage Conditions:</b>	Store at -20 °C	
<b>Solubility:</b>	hot DMSO, DMF, Acetonitrile	

Test Description	Specifications	Results
<b>Visual Description</b>	White to off-white solid	<b>Conforms</b>
<b>Identification</b>		
IR	Conforms to structure	<b>Conforms</b>
MS	Conforms to structure	<b>Conforms</b>
<sup>1</sup> H NMR	Conforms to structure	<b>Conforms</b>
<b>Elemental Analysis</b>	Conforms to structure	<b>Conforms</b>
<b>Purity (HPLC)</b>	Not less than 95.0%	<b>99.8%</b>
<b>Impurity (HPLC)</b>	N/A	
<b>Isotopic Enrichment</b>	Not less than 98.0%	<b>99.8%</b>
<b>Water Content (KF)</b>	N/A	<b>0.6%</b>
<b>Residual Solvents (NMR)</b>	0.3% <i>n</i> -hexane and 0.8% dichloromethane	
<b>Assay (%)</b>	Not less than 90.0%	<b>98.1%</b>
<b>Recommendation:</b>	<b>Released.</b>	

Name	Department	Signature	Date
Reviewed and approved by:	Analytical Services		
Approved by:	Quality Assurance		

**Attachments:** HPLC, IR, MS and NMR spectra.