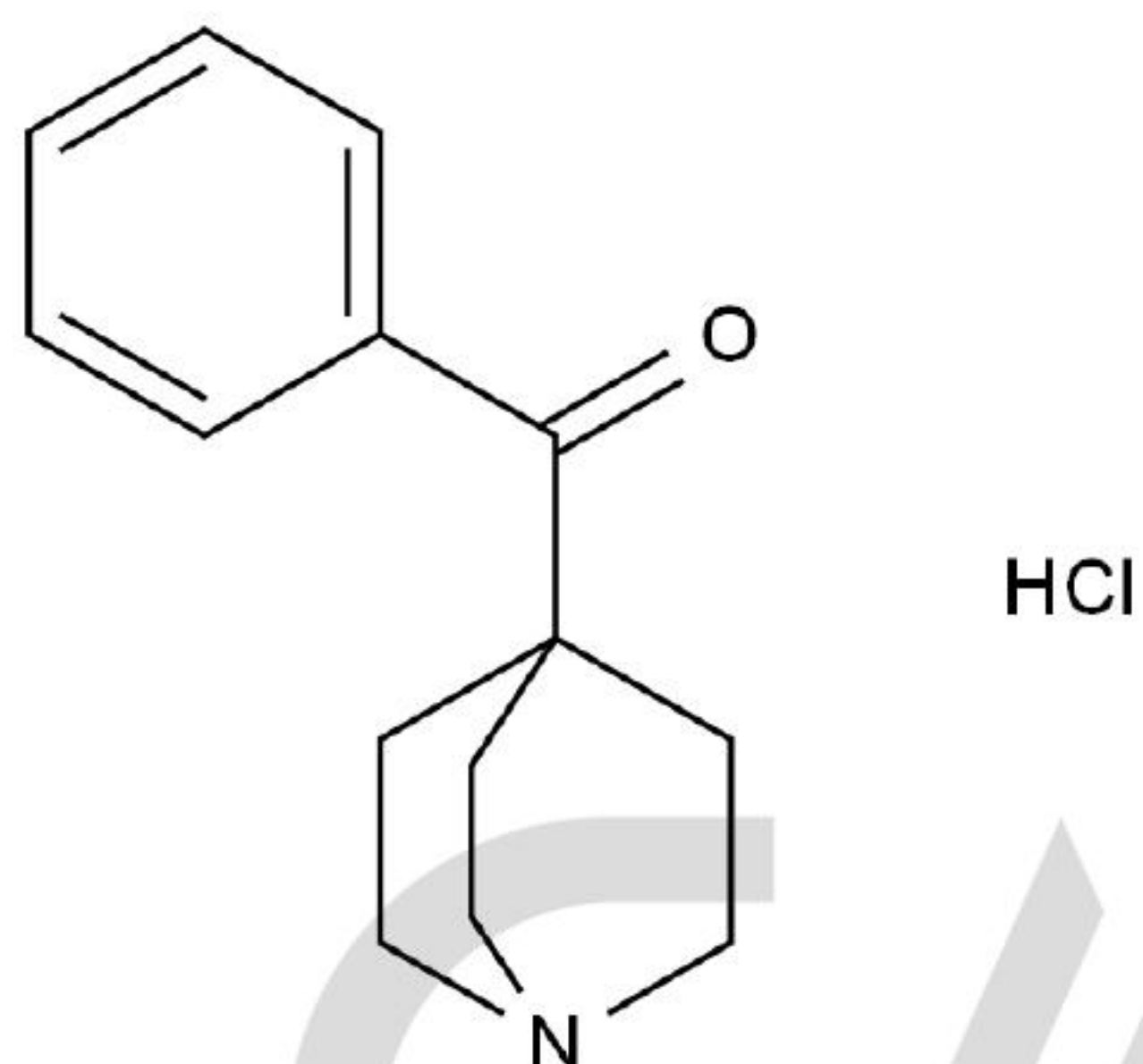


Certificate of Analysis

Reference Material

Product Name:	Umeclidinium Impurity 15	Catalogue Number:	C4X-133915
Chemical Name:	N/A	Lot Number:	0705-RD-0007
CAS Number:	2230024-91-4(free base)	Expiry Date:	Jul 06, 2025
Molecular Formula:	C ₁₄ H ₁₇ NO HCl	Storage:	2°C ~ 8°C Protected from light and Sealed
Molecular Weight:	215.29 36.46		

Chemical Structure:



Test Items	Method	Results
Appearance	Visual inspection	White Powder
Identification	LCMS&HNMR	Confirmed
Purity	HPLC	100.000%
Loss On Drying	TGA	0.0453%
Assay		99.9%

Comment:

The calculation of the 100% method follows the formula (calculated on the non-dried basis):

Assay (%) = (100% - Loss On Drying) * Purity HPLC (%) / 100%

Loss On Drying is considered as absolute effect, HPLC purity is considered as relative effect.

Signature:

Prepared by:

Hin lam

Reviewed by:

Nacy

Aporoved by General manager:

David

Date: May 19, 2023

Date: May 22, 2023

Date: May 22, 2023

