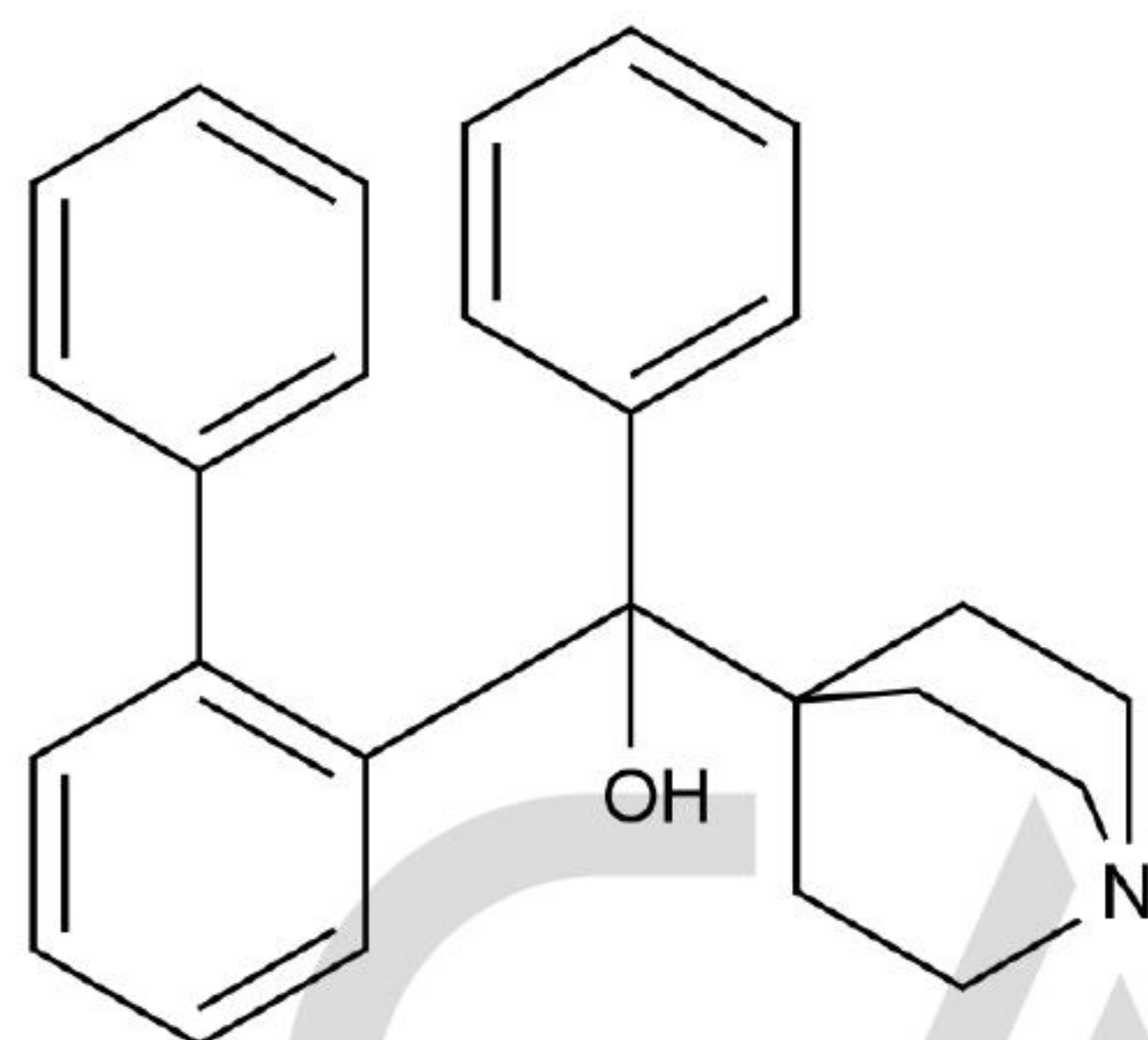


# Certificate of Analysis

## Reference Material

|                    |                                    |                   |                                           |
|--------------------|------------------------------------|-------------------|-------------------------------------------|
| Product Name:      | Umeclidinium Impurity 19           | Catalogue Number: | C4X-133919                                |
| Chemical Name:     | N/A                                | Lot Number:       | 0526-RE-0020                              |
| CAS Number:        | 2253743-32-5                       | Expiry Date:      | Jun 01, 2026                              |
| Molecular Formula: | C <sub>26</sub> H <sub>27</sub> NO | Storage:          | 2°C ~ 8°C Protected from light and Sealed |
| Molecular Weight:  | 369.50                             |                   |                                           |

Chemical Structure:



| Test Items     | Method            | Results                  |
|----------------|-------------------|--------------------------|
| Appearance     | Visual inspection | White to Off-White Solid |
| Identification | HRMS&HNMR         | Confirmed                |
| Purity         | HPLC              | 99.672%                  |
| Loss On Drying | TGA               | 0.0781%                  |
| Assay          |                   | 99.6%                    |

## 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:

*Nacy*

Reviewed by:

*Xenia*

Aporoved by General manager:

*David*

Date: Jun 02, 2023

Date: Jun 12, 2023

Date: Jun 12, 2023

