

# Certificate of Analysis

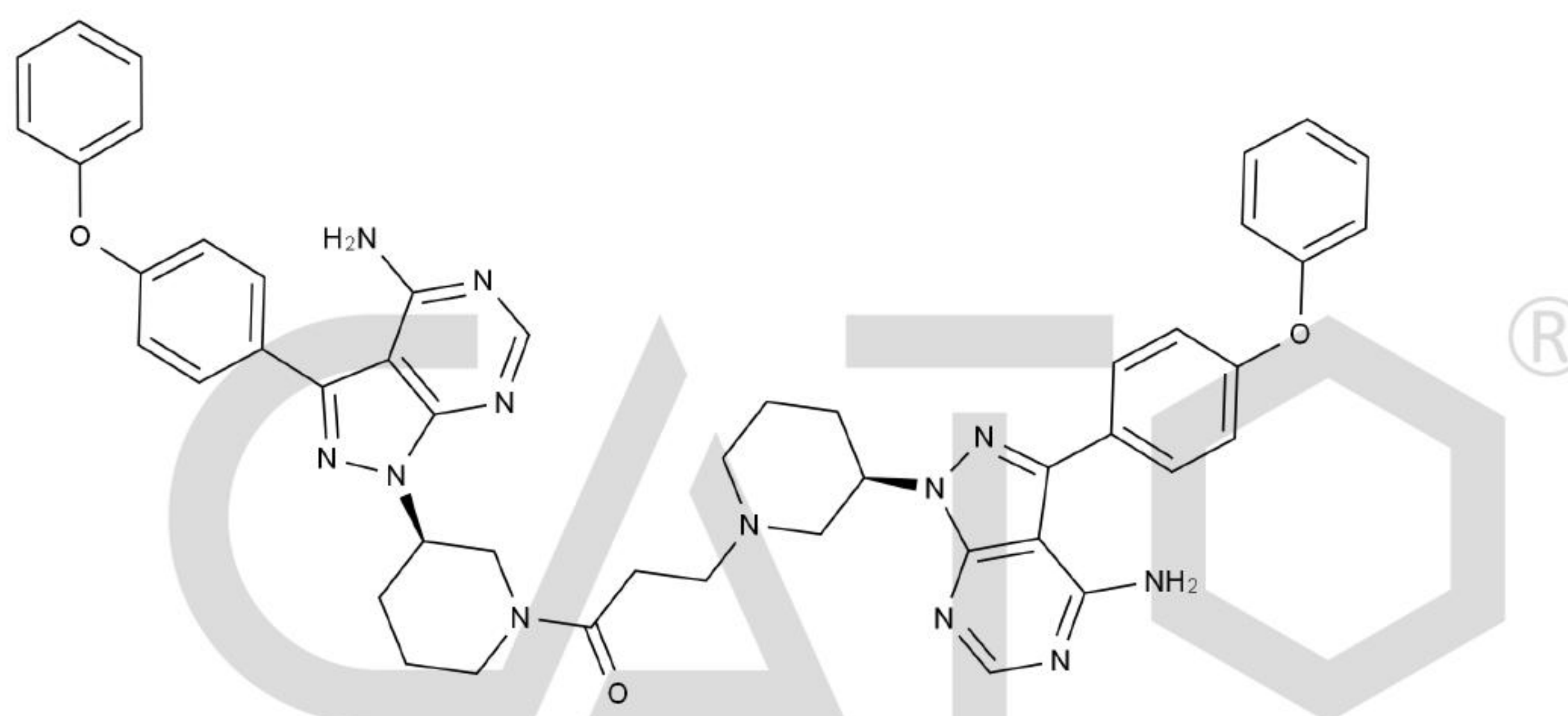
## Reference Material & Standard

|                    |                                                                |                     |                                           |
|--------------------|----------------------------------------------------------------|---------------------|-------------------------------------------|
| Product Name:      | Ibrutinib Impurity 5                                           | Catalogue Number:   | C4X-10645                                 |
| Synonyms:          | N/A                                                            | Lot Number:         | 0415-RH-0077                              |
| CAS Number:        | 1987905-93-0                                                   | Expiry Date:        | Apr 14, 2030                              |
| Molecular Formula: | C <sub>47</sub> H <sub>46</sub> N <sub>12</sub> O <sub>3</sub> | Storage:            | 2°C ~ 8°C Protected from light and Sealed |
| Molecular Weight:  | 826.95                                                         | Shipping Condition: | Shipping at Room Temperature              |

Warning:



Chemical Structure:



| Test Items     | Method            | Results     |
|----------------|-------------------|-------------|
| Appearance     | Visual inspection | White Solid |
| Identification | LCMS&HNMR         | Confirmed   |
| Purity         | HPLC              | 99.8%       |
| Assay          | qNMR              | 94.9%       |

Signature:

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Reviewed by:

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Approved by General Manager:

*David*

Date: Apr 15, 2026

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