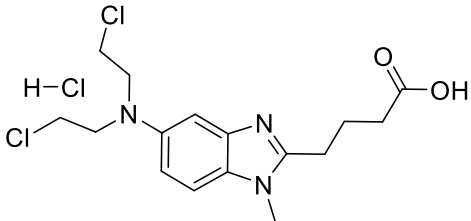




## Certificate of Analysis

<b>MedKoo Cat#:</b> 200470	<b>Product Name:</b> Bendamustine HCl	<b>Lot#:</b> A20T03K31
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<b>Chemical name</b>	
4-[5-[bis(2-chloroethyl)amino]-1-methylbenzimidazol-2-yl]butanoic acid hydrochloride	
<b>Synonyms</b>	
SDX105; SDX 105; SDX-105; DD6304600; Bendamustine HCl; Bendamustine hydrochloride; Brand name: Treanda.	
<b>Chemical structure</b>	<b>CAS# and Theoretical analysis</b>
	MedKoo Code#: 200470 Name: Bendamustine HCl CAS#:3543-75-7 Lot#:A20T03K31 Chemical Formula: C <sub>16</sub> H <sub>22</sub> Cl <sub>3</sub> N <sub>3</sub> O <sub>2</sub> Molecular Weight: 394.72 <i>Bendamustine (free base)</i> Chemical Formula: C <sub>16</sub> H <sub>21</sub> Cl <sub>2</sub> N <sub>3</sub> O <sub>2</sub> Exact Mass: 357.10108; Molecular Weight: 358.26

Analysis item	Specifications / Results
<b>Appearance</b>	White to off-white solid powder
<b>Structure</b>	<sup>1</sup> H-NMR analysis matches the structure. MS analysis gives the correct molecule weight. Both NMR and MS data are consistent with those reported in the literature.
<b>Purity (HPLC)</b>	>99.0%
<b>Solubility</b>	DMSO 79 mg/mL; Water 15 mg/mL; Ethanol 17 mg/mL
<b>Conclusion</b>	This product conforms with MedKoo's quality standards
<b>Shipping condition</b>	Shipped under ambient temperature as non-hazardous chemical. This product is stable for a few weeks during ordinary shipping and time spent in customs.
<b>Storage condition</b>	Short term storage (weeks): 0 – 4 °C under dry condition Long term storage (months): -20 °C under dry condition
<b>Shelf life</b>	At least 5 years if properly stored.

**CAUTION: NOT FULLY TESTED. FOR RESEARCH ONLY, NOT FOR HUMAN USE**