

**DERREN HEALTHCARE PVT. LTD.**

Plot No. #33, 35/p & 36/p XCELON Industrial Park, Lane besides Chak-de-India
Weighbridge, Sarkhej-Bavla Highway Village: Vasna-Chachrawadi,
Ahmedabad-382 213, Gujarat (India)

**CERTIFICATE OF ANALYSIS
(FINISHED PRODUCT)**

Name of Product	Atracurium Besylate Injection 10 mg/ml(ATRANIUM)		
Batch No.	BS24009	A.R. No.	FP/24/0042
Mfg. Date	06/24	Exp. Date	05/26
Sampled Qty.	56 Nos.	Date of Analysis	03/06/24
Batch Size	50 Ltr.	Date of Release	22/06/24
Container Type	Clear Glass Ampoule	Fill volume	2.7 ml
Mfg. Lic. No.	G/28/1862		

Sr. No.	Test	Result	Specification
1	Description	Clear & colorless liquid free from visible particles and fibers.	Clear & colorless liquid free from visible particles and fibers.
2	Extractable volume	2.6 ml	NLT 2.5
3	Identification		
3.1	Identification A By HPLC	The principal peaks of three isomers of atracurium besylate in the chromatogram obtained with the test solution is corresponds to the peaks in the chromatogram obtained with the reference solution..	The principal peaks of three isomers of atracurium besylate in the chromatogram obtained with the test solution should be corresponds to the peaks in the chromatogram obtained with the reference solution..
4	pH	3.55	3.0 to 3.65
5	Related Substance		
5.1	Test - 1		
	Acidic Compound	0.05 %	NMT 6.0%
	Sum of Hydroxy compound trans-isomers and cis isomer	0.12 %	NMT 6.0%
	laudanosine	0.03 %	NMT 3.0%
	Sum of Monoacrylate trans-isomers and cis isomer	0.07%	NMT 3.0%
	Any other Impurity	0.07 %	NMT 0.1%
	Total impurity	0.84%	NMT 15.0%
5.2	Test - 2		
	Atracurium Impurity-A	0.25 %	NMT 1.50%
	Atracurium Impurity-K	0.08 % (Imp I + Imp H + Imp K)	NMT 1.00%
	Atracurium Impurity-I		NMT 1.00%
	Atracurium Impurity-H		NMT 1.00%

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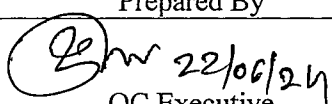
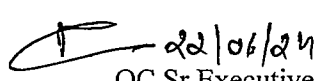

**CERTIFICATE OF ANALYSIS
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Name of Product	Atracurium Besylate Injection 10 mg/ml(ATRANIUM)		
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	Atracurium Impurity-F	Not detected	NMT 1.00%
6	Bacterial endotoxin	Less than 5.56 EU/mg of Atracurium	NMT 5.56 EU/mg of Atracurium
7	Particulate matter		
7.1	By Visual Inspection	The solution is free from particles that is observed by inspection with the unaided eye.	The solution should be free from particles that can be observed by inspection with the unaided eye.
7.2	By Light Obscuration Method	≥ 10 microns= 156.60 /Container ≥ 25 Microns= 6.80 /Container	Sub visible particle by LPC ≥ 10 microns=NMT 6000/Container ≥ 25 Microns=NMT 600/Container
8	Sterility test	Sterile	Should be sterile
9	Assay		
9.1	Each ml contains Atracurium besylate (eq. Atracurium IP 10 mg)	98.8 %	90.0% To 115.0 % of the labeled amount of Atracurium
	Trans- trans isomer	5.74 %	Not less than 5.0% and Not more than 6.5%.
	cis-trans isomer	36.27 %	Not less than 34.5% and Not more than 38.5%.
	cis-cis isomer	56.73 %	Not less than 55.0% and Not more than 60.0%.

Conclusion: The above sample complies as per IP specification.

In the opinion of the undersigned the sample referred to above is of **standard** / ~~not of standard~~ quality as defined in the act and the rules made there under for the reasons given above.

Prepared By	Checked By	Approved By
 QC Executive	 QC Sr.Executive	 QA MANAGER