

**DETERMINATION OF
KETAMINE
IN
Hair**



**PROFICIENCY TEST
PROGRAM
GLHK1001**

FINAL REPORT



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Summary of Results

1. The objective of this proficiency test program (GLHK1001) was to evaluate the capability of participants on the quantitative analysis of ketamine and its major metabolite, norketamine in hair. Pulverised hair test materials were used as the test samples in this program.
2. A total of 10 laboratories registered the program and 8 of them returned results to the organizer within the scheduled timeline. Z-score was used to assess participants' performance for ketamine and norketamine. The respective consensus mean of ketamine and norketamine determined using robust statistics were the assigned values, and standard deviations for proficiency assessment were derived from Horwitz equation.
3. Summary of participants' results for ketamine and norketamine:

Statistical Parameter	Ketamine	Norketamine
No. of data submitted	8	7
No. of data used for calculation	7	7
Assigned value (ng/mg)	3.36	0.405
Standard deviation for proficiency assessment	0.45	0.074

4. Summary of z-scores for ketamine and norketamine

Lab. Code	Ketamine	Norketamine
1	1.3	0.8
2	-0.03	-3.0
3	*	--
4	-2.1	-2.3
5	-4.2	2.4
6	4.5	0.3
7	0.8	2.0
8	-0.03	-0.3

* The laboratory indicated that the result was generated from a semi-quantitative method, and hence it was not included in the determination of assigned value. The z-score of the result is -4.5, which was evaluated with reference to the calculated assigned value and the standard deviation for proficiency assessment.