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**Report to BioSpectra Inc. for the Analysis of four Samples of
TRIS HCL for the Presence of Four Nitrosamines.**

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Introduction

At the request of BioSpectra Inc. (BSI), Kinentia Biosciences (Kinentia) has conducted testing on four lots of TRIS HCL provided by BSI for the presence of the following four nitrosamines:

1. *N,N*-Dimethylnitrosamine (NDMA)
2. *N,N*-Diethylnitrosamine (NDEA)
3. *N*-isopropyl-*N*-Ethylnitrosamine (NPEA)
4. *N*-Methyl, *N*-Phenylnitrosamine (NMPA)

Results

The testing protocol followed the fluorescent tagging methodology recently described by Kinentia in its report titled *Final Report to BioSpectra Inc. for Development of an Analytical Method for the Detection of Various Nitrosamines* dated March 31, 2021. The results of this testing are shown in **Table 1** below.

Nitrosamines **2**, **3** and **4** were undetected using the fluorescence tagging protocol previously described using 5-(dimethylamino)naphthalene-1-sulfonyl chloride (dansyl chloride). Due to the presence of a co-eluting impurity the absolute quantitation of nitrosamine **1** was not possible. However, the use of an authentic sample of the dansylamide derived from **1** as a reference standard allowed for the relative quantitation of **1** by comparisons of HPLC AUC values. Using this methodology, it could be determined that less than 96 ng/mL was present in all samples submitted.

Presence of *N*-Nitrosodiisopropylamine and *N*-Nitroso-4-aminobutyric acid.

Whereas analysis for the presence of *N*-Nitrosodiisopropylamine and *N*-Nitroso-4-aminobutyric acid was not conducted, analysis for the manufacturing process for Tris HCl reveals that the possibility for the presence of these two nitrosamines is very limited. Since no reagents or solvents are utilized in the manufacturing process for Tris HCl that could generate these nitrosamines, their presence in the final material is very unlikely.

Table 1

| Lot Number | Testing Result |
|-------------------|---|
| THCL-0221-1 | NDMA – <96ng / mL NDEA – ND NPEA – ND NMPA - ND |
| TRCL-0221-2 | NDMA - < 96ng / mL NDEA – ND NPEA – ND NMPA - ND |
| THCL-0221-3 | NDMA - < 96ng / mL NDEA – ND NPEA – ND NMPA - ND |
| THCL-0221-4 | NDMA - < 96ng / mL NDEA – ND NPEA – ND NMPA - ND |

ND = Not detected