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**Design and optimization of a luminescent Samarium complex of Isoprenaline:
A chemometric approach based on Factorial design and Box-Behnken
response surface methodology**

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Abstract

A chemometrically optimized procedure has been developed for the determination of isoprenaline (ISO) in the parent substance as well as in its respective pharmaceutical preparation. It is worth mentioning that although spectroscopic determination of Isoprenaline metal complexes has been described in literature, yet, no methods for the quantification of Isoprenaline with Samarium nor any other lanthanide metal have been reported. Fractional factorial design (FFD) was implemented in the initial screening procedure of the four designated factors ,

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