Title: **A bibliographic review on capuramycin, a nucleosidic natural product with antibiotic properties**

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Date: July 2020

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Antibacterial resistance has become an urgent issue for human being and animal's health. Among these resistant bacteria stand out important pathogens such as *M. tuberculosis*, *M. smegmatis* and *S. pneumoniae*. Notably, these pathogens were inhibited by natural uridine antibiotics such as capuramycin, a compound first isolated from *Streptomyces griseus*. This type of antibiotics acts by inhibiting MraY, an enzyme involved in the biosynthesis of peptydoglican component of the bacteria cell wall, but showed low antibacterial activity. Consequently, capuramycin analogues have been prepared by organic synthesis and biosynthesis to allow structure-activity studies as a prior step towards the development of new antibacterial drugs.

In this context, this present TFG report contains a bibliographic review on capuramycin, with a particular emphasis on the synthetic routes of the compound and its derivatives, the elucidation of the biosynthetic pathways and their applications, and studies of structure-antibacterial activity.