

## **PROJECT REVIEW**

### ***“Metabolism and detection of ghrelin and new ghrelin mimetics”***

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Ghrelin and Ghrelin mimetics belong to the prohibited substances according to the current WADA Prohibited List. After administration, they induce the secretion of growth hormone into the circulation and are considered as performance enhancing accordingly. While Ghrelin itself is an endogenous peptide hormone, Ghrelin mimetics (such as Capromorelin, Macimorelin and Tabimorelin) are low molecular mass synthetic peptides (or peptide similars) which act as agonists at the ghrelin receptor. Although prohibited, efficient detection methods for these drugs are scarce. Thus, it is planned to develop analytical methods to determine the potential misuse of the new hGhrelin mimetics (Capromorelin, Macimorelin and Tabimorelin) in doping control samples. This will include the investigation of efficient extraction procedures, metabolism studies (in-vitro/ in-vivo) and identification of reliable target analytes in the respective matrix. Results will be validated and published.