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Herbal medicines in Brazil: towards a preclinical profile of the RENISUS plants

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The Brazilian Unified Public Health System (SUS) produced a list of 71 plant species of interest (RENISUS), which could be made available to the population in the future. Although their indications, phytochemistry and acute toxicity is known to a certain extent, little is known about their potential effects upon about pharmacokinetic predictors. The last aspect is paramount as Physicians at SUS must prescribe essential drugs (RENAME) together with herbal medicines (RENISUS) with assurance of minimal possibilities of so-called herb-drug interactions.

We will present to the Brazilian Scientific community the collaborative efforts of our research centres in the theoretical and preclinical herb-drug interactions. Our results so far afford for first time the *in vitro* effects of native Brazilian medicinal plants listed in RENISUS as well as several well-known European and Latin-American medicinal plants on key Phase 1 and Phase 2 metabolic mechanisms and the transporter P-glycoprotein. The speaker will explain the experimental design involved, the challenges ahead and the need for a more focused collaborative effort involving all Brazilian and international researchers interested on the use of Herbal Medicines at clinical level.

References

- Mazzari, A.L., Prieto, J.M., 2014. Herbal medicines in Brazil: pharmacokinetic profile and potential herb-drug interactions. *Front Pharmacol.* 10.3389/fphar.2014.00162.
- Mazzari, A.L., Milton, F., Frangos, S., Carvalho, A.C., Silveira, D., de Assis Rocha Neves, F., Prieto, J.M., 2016. *In vitro* effects of four native Brazilian medicinal plants in CYP3A4 mRNA gene expression, glutathione levels, and P-glycoprotein activity. *Front Pharmacol.* doi: 10.3389/fphar.2016.00265.