Abstract: **P1453**

**Safe multidisciplinary management of new therapies: the ritmo project (real time continuous web monitoring)**

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**Topic(s):**
Remote Patient Monitoring and Telemedicine

**Citation:**
Background: Fingolimod is an immunosuppressive drug that prevents the typical autoimmune responses of multiple sclerosis (MS). This drug can cause, even after the first dose, bradycardia and atroventricular conduction block (AVB). According to a decree of the Committee for Medicinal Products for Human Use (CHMP), the first administration of a dose of fingolimod must meet the following conditions: a) 12-lead electrocardiogram (ECG) and blood pressure (BP) evaluations before first dose administration; b) continuous ECG and BP monitoring every hour during the first 6 hours of treatment. The aim of the study was to evaluate the efficicacy of our virtual Intensive Care Unit connected to selected Departments of Neurology for cardiology monitoring via web, during the first dose administration of fingolimod in patients with MS.

Methods: Health Telematic Network, in collaboration with our Cardiology Department, has installed in several Neurology Departments in the country intensive care equipment with real time monitoring via the web of ECG, BP and oximetry. The telemonitoring system is composed of an IntelliVue MP2 monitor, for 12-lead ECG recording, and by an IntelliVue Philips M3150 Central, for continuous remote monitoring of ECG and the detection and storage of arrhythmias. The HTN Cardiologist thus can evaluate in real time ECG monitored and each alarm detected.

Results: From Jan 2014 to Dec 2018, 172 sites participated and 6041 patients were enrolled. The telemonitoring system recognized 5116 episodes of bradycardia, 297 first degree AVB, 213 second degree AVB Mobitz I, 48 second degree AVB Mobitz II, 618 pathological lengthening of the QTc interval, single monomorph ventricular ectopic beats in 266 patients, bigeminy ventricular extrasystoles in 15 patients and polymorphic ventricular extrasystoles in 3 cases. 6 cases of nonsustained ventricular tachycardia occurred and were recognized.

Conclusion: This web-based real time telemonitoring project was an optimal solution for the administration of the first dose of fingolimod, according to current indications of the CHMP. The RITMO project could lead the way for the use of a multidisciplinary approach for the management of new therapies.