

OUR FIRST CLINICAL EXPERIENCE WITH RIOCIGUAT IN CHRONIC THROMBOEMBOLIC PULMONARY HYPERTENSION

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Objective: Introduction: Riociguat, a soluble guanylate cyclase stimulator (sGC), is a first drug approved for the treatment of patients with chronic thromboembolic pulmonary hypertension (CTEPH) (inoperable or persistent/recurrent following surgery).

Aim: To analyze the safety and efficacy of riociguat in patients with CTEPH after 6 and 12 months of treatment. Methods: Retrospective study where we collected the data (6-min walking test distance (6MWD), the level of brain natriuretic peptide (NT-proBNP) and clinical condition) from our hospital pulmonary hypertension registry for patients who were 6 or 12 months on treatment with riociguat.

Results: We included 7 patients who were on treatment for 12 months (5 females, 2 males) and one male patient who was on treatment for 6 months. They were all receiving a full daily dose of riociguat without any side effects. After 6 months mean 6MWD was increased for 66 m and after 12 months 6MWTD was increased for 61 m compared with the initial 6MWTD (initial mean 295+/-71*, after 6 months 361+/-67, after 12 months 342+/-49 m). NT-proBNP was improved after 6 and 12 months: initial 2796+/3155,2; after 6 months 2612+/-2082,08, after 12 months 1758+/-1490,05). Seven of our patients reported subjective clinical improvement and one patient unchanged condition. Four patients had improvement in NYHA functional class (from NYHA 3 to 2). Conclusion: After one year of treatment with riociguat all the patients were in stable or improved function class.



Riociguat improved exercise capacity (measured by 6MWD) and NT-proBNP levels. There were no side effects of the treatment. *means+/-standard deviation

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