



LONG-TERM EFFICACY OF RIOCIGUAT IN PATIENTS WITH CTEPH: A SINGLE-CENTRE, REAL-LIFE RETROSPECTIVE ANALYSIS

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Objective:

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Riociguat is one of the treatment options for patients with inoperable chronic thromboembolic pulmonary hypertension (CTEPH). This study aimed to determine the long-term efficacy and safety of riociguat in patients with CTEPH in clinical practice.



Methods:

Methods

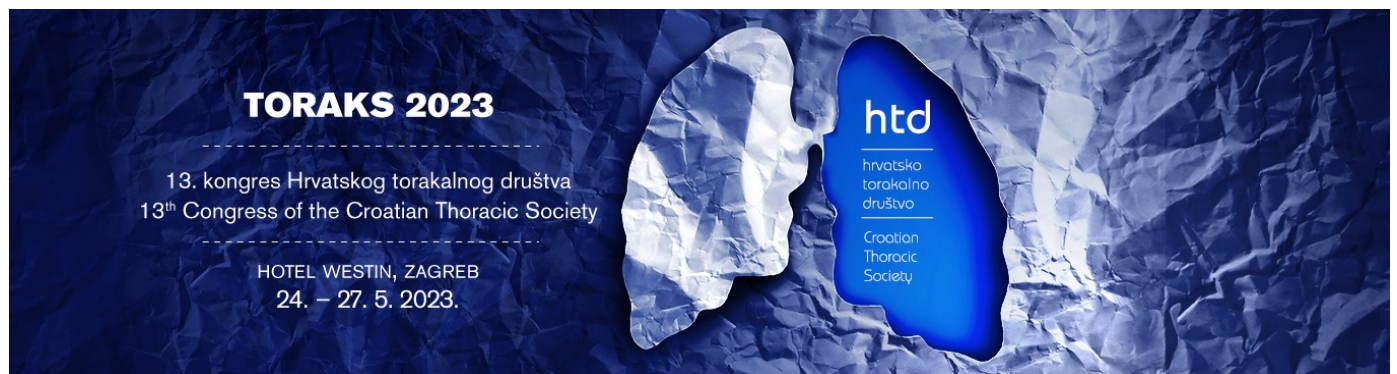
This is a retrospective, observational, non-comparative case study for the period from June, 2016 to December, 2022. WHO functional class (WHO-FC) and NT-proBNP levels were recorded at baseline and each year of follow-up.

Result:

Results

Out of 46 patients treated with riociguat, 41 are still on treatment, 2 are lost to follow-up, while 3 died from causes unrelated to the drug. The number of patients, follow-up duration (y), and mean change in NT-proBNP from baseline are displayed in Table 1. Riociguat treatment significantly impacted NT-proBNP levels over time (Wilk's $\Lambda = 0.55$, $F(3,14) = 3.74$, $p = 0.037$). Levels significantly decreased at year 1 ($t[16] = 2.22$, $p = 0.041$), but the effect was lost by the year 4 ($t[16] = -2.99$, $p = 0.009$). According to WHO-FC, patients seem to improve and remain stable up to year three. Riociguat was well tolerated, there were no significant side effects and no patient discontinued therapy due to adverse events.

Conclusion:



Conclusion

Riociguat showed good tolerability and long-term effect on WHO-FC and NT-proBNP in our heterogeneous cohort of CTEPH patients. Still, it seems that the effect lessens after three years of treatment. Additional studies are needed to elucidate this observation.