

## Authors' response

We would like to thank Wójcik et al. [1] for their valuable comments to our paper [2] which inspired us to further discussion. In our cohort, we observed an important discrepancy between electrophysiological and clinical efficacy. The first one seems to be very important because it makes our patients healthy according to World Health Organization definition of health. The second definition is concordant with electrophysiological guidelines [3], however, in the majority of these patients, atrial fibrillation (AF) episodes are no longer symptomatic and should be included as a risk factor for stroke. That is why the redo procedures were not frequent and the analysis of the pattern of reconnections in pulmonary veins (PV) has not been performed so far. We agree that the most likely cause of recurrence of paroxysmal AF is reconnection in the PV ostia and that in patients with persistent AF the problem is more sophisticated. Thus, the results in persistent AF were worse.

Our center has so far performed circa 1,500 ablations of AF, including other new single shot technologies [4, 5]. We are trying to determine the optimal choice of technology for the individual patient. Pulmonary vein ablation catheter (PVAC) and nMarq catheters seem to be good choices for patients who are not optimal for cryoballoon ablation (e.g. allergy to contrast, renal insufficiency, thyroid diseases, atypical anatomy).

The analysis of anatomical factors was performed and presented in our paper. There is a univariate analysis of factors that influence the efficacy of the method. Common pulmonary trunk was not a risk factor for worse prognosis of PV isolation. However, in our general population common pulmonary trunk decreased the success rate of the ablation procedure [6].

Our complication rate was smaller than in the Worldwide Survey [7] and the US-study [8]. To increase the safety of PVAC we are trying to use

guidelines from ERACE trial in which the amount of silent cerebral ischemia was similar to other methods used in pulmonary vein isolation.

We agree that PVAC ablation should be rather reserved for selected population, including PV-trigger-dependent AF and performed by an experienced operator. Nowadays, we do not use it in patients with persistent AF.

**Conflict of interest:** None declared

### References

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