Reviewer’s report

Title: Personalized Medicine and Atrial Fibrillation: Will it ever happen?

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Reviewer: Dobromir Dobrev

Reviewer’s report:

This is a nice and timely review on genetics in AF and the potential consequences of genetic work for therapy guidance. I have a few suggestions to improve the paper.

Major comments:

- The complexity of remodelling changes in the atria of AF patients (see Wakili et al., J Clin Invest 2011) and how novel molecular targets can be exploited for AF treatment (Dobrev et al., Nat Rev Drug Discov 2012) should be mentioned.

- The most established gene variations related to AF including work in engineered mouse lines recently used to specifically study the mechanisms of AF related to CPVT (e.g. Shan J et al., Circ Res, 25 July 2012) should be stressed to the readers. A table might be helpful.

- As the authors discussed, AF is a phenotypic sign of many different pathologies. Although the need for disease-specific targeted therapy is recognized, the notion that different forms of AF exist and several „forms” of genetically conferred AF might exist is not fully understood. This has recently been classified by a consensus conference of the German AF Competence Network and European Heart Rhythm Association (Kirchhof et al., Europace 2011). This paper should be referred to the readers.

Quality of written English: Acceptable

Statistical review: No, the manuscript does not need to be seen by a statistician.

Declaration of competing interests:

No conflicts of interests to disclose.