Feasibility of Outpatient Antiarrhythmic Drug Initiation in Patients with Atrial Fibrillation

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Background

- Atrial fibrillation (AF) is the *most common* arrhythmia worldwide
- Some antiarrhythmic drugs (AAD) like **sotalol** or **dofetilide** are used in hospitals to monitor proarrhythmic effects
- **Hospitalization poses challenges** to patients and physicians, making remote AAD initiation an attractive alternative
- Advancements in cardiac monitoring may *promote safe remote AAD initiation*

Methods

Searched comprehensively through PubMed and Google Scholar databases

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Identified outpatient sotalol and dofetilide initiation in AF patients

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Study and outcomes data extraction

Commercially available cardiac monitoring devices used to *support safe* **outpatient antiarrhythmic drug initiation**

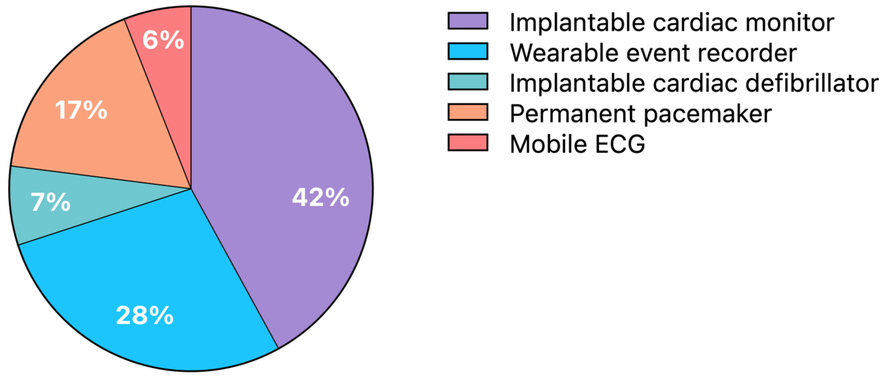

Figure 1: Cardiac monitoring devices (n=204) used in the identified research studies.

No *ventricular arrythmias* reported

78% of patients achieved sustained pharmacologic cardioversion

No ventricular arrythmias reported (e.g. TdP)

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Results

- **Five studies** with **204 patients** were identified that met the inclusion criteria
- The most popular cardiac monitors were **implantable loop recorders** with 87 individuals (42%) and **continuous event loop recorders** with 57 individuals (28%)
- **87 individuals (43%)** had **continuous monitoring** for up to 8 hours
- **177 individuals (57%)** were **monitored intermittently**, with a second scheduled ECG transmission in the second hour following a dose
- **Successful initiation** of AAD was defined as *pharmacological cardioversion to sinus rhythm* **without adverse events**
- **No ventricular arrhythmias were observed**

Conclusion

- Outpatient AAD is **feasible** with utilization of commercially available devices
- *Lack of ventricular arrhythmia* occurrence supports potential for outpatient AAD to safely and effectively manage AF, likely *minimizing need for costly hospitalization*
- Future studies need to evaluate the use and optimize the management of cardiac devices in outpatient AF monitoring in order to reduce overall health costs

Disclosures

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This research includes reviews of off-label and investigational use of Sotalol and Dofetilide.