

# Hybrid ablation of atrial fibrillation

## Citation for published version (APA):

Pison, L. (2013). *Hybrid ablation of atrial fibrillation*. Datawyse / Universitaire Pers Maastricht. <https://doi.org/10.26481/dis.20131218lp>

## Document status and date:

Published: 01/01/2013

## DOI:

[10.26481/dis.20131218lp](https://doi.org/10.26481/dis.20131218lp)

## Document Version:

Publisher's PDF, also known as Version of record

## Please check the document version of this publication:

- A submitted manuscript is the version of the article upon submission and before peer-review. There can be important differences between the submitted version and the official published version of record. People interested in the research are advised to contact the author for the final version of the publication, or visit the DOI to the publisher's website.
- The final author version and the galley proof are versions of the publication after peer review.
- The final published version features the final layout of the paper including the volume, issue and page numbers.

[Link to publication](#)

## General rights

Copyright and moral rights for the publications made accessible in the public portal are retained by the authors and/or other copyright owners and it is a condition of accessing publications that users recognise and abide by the legal requirements associated with these rights.

- Users may download and print one copy of any publication from the public portal for the purpose of private study or research.
- You may not further distribute the material or use it for any profit-making activity or commercial gain
- You may freely distribute the URL identifying the publication in the public portal.

If the publication is distributed under the terms of Article 25fa of the Dutch Copyright Act, indicated by the "Taverne" license above, please follow below link for the End User Agreement:

[www.umlib.nl/taverne-license](http://www.umlib.nl/taverne-license)

## Take down policy

If you believe that this document breaches copyright please contact us at:

[repository@maastrichtuniversity.nl](mailto:repository@maastrichtuniversity.nl)

providing details and we will investigate your claim.

The cornerstone of atrial fibrillation (AF) is electrical isolation of the pulmonary veins (PV). In patients with non-paroxysmal AF, PV isolation alone is insufficient and one needs to modify the atrial arrhythmogenic substrate. AF ablation is mostly performed using a transvenous, endocardial approach with catheters. This technique enables one to characterize the underlying substrate in order to tailor the ablation procedure but these ablation lesions are not always transmural nor long lasting. Thoracoscopic surgical AF ablation techniques, on the other hand, create more reliable linear lesions but the lesion set is based on empirical assumptions rather than specific patient characteristics. Performed in combination (hybrid AF ablation), both approaches are complementary as they overcome their mutual shortcomings. In this thesis, we demonstrated that the hybrid AF ablation procedure is safe and feasible. Medium and long-term results are encouraging, especially in currently challenging settings such as non-paroxysmal AF and failed endocardial catheter ablation procedures.