

Targeting the heart

Citation for published version (APA):

Pinheiro Vilaca, A. (2022). *Targeting the heart: extracellular vesicles and beyond*. [Doctoral Thesis, Maastricht University, Universidade de Coimbra]. Maastricht University. <https://doi.org/10.26481/dis.20221018av>

Document status and date:

Published: 01/01/2022

DOI:

[10.26481/dis.20221018av](https://doi.org/10.26481/dis.20221018av)

Document Version:

Publisher's PDF, also known as Version of record

Please check the document version of this publication:

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**Targeting the heart:
Extracellular vesicles and beyond**

Propositions

1. The capacity of EVs to deliver both natural and synthetic ncRNAs including lncRNAs presents a competitive advantage of EVs over other delivery systems. (This thesis)
2. EVs can be loaded with different lncRNA splice variants and successfully deliver them to different cardiac cell types. (This thesis)
3. Once systemically injected, EVs do not naturally accumulate in the heart, limiting their use for non-invasive cardiac applications. (This thesis)
4. Remote targeting of EVs is a feasible non-invasive approach to increase EV retention in the heart. (This thesis)
5. “Research is to see what everybody else has seen, and to think what nobody else has thought.” (Albert Szent-Györgyi)
6. “Bad times have a scientific value. These are occasions a good learner would not miss.” (Ralph Waldo Emerson)
7. “The scientist is not a person who gives the right answers, he’s one who asks the right questions.” (Claude Levi-Strauss)
8. “Sê todo em cada coisa. Põe quanto és/ No mínimo que fazes.” (3-4) in "Para Ser Grande, Sê Inteiro" from Ricardo Reis (Fernando Pessoa); a poem about giving your best in everything that you do

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18th October, 2022