

Learning from routinely produced clinical data and Big Data technology in Radiation Oncology

Citation for published version (APA):

Lustberg, T. (2018). *Learning from routinely produced clinical data and Big Data technology in Radiation Oncology*. [Doctoral Thesis, Maastricht University]. Datawyse / Universitaire Pers Maastricht. <https://doi.org/10.26481/dis.20181206tl>

Document status and date:

Published: 01/01/2018

DOI:

[10.26481/dis.20181206tl](https://doi.org/10.26481/dis.20181206tl)

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

Take down policy

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

repository@maastrichtuniversity.nl

providing details and we will investigate your claim.

Propositions belonging to this dissertation

**Learning from routinely produced clinical data and
Big Data technology in Radiation Oncology**

Tim Lustberg

“To improve and personalize medicine, rapid learning platforms must be able to process FAIR ‘Big Data’ to evaluate current clinical practice and to guide further innovation”

TL

“routine clinical data contains valuable information that could be harvested to improve and personalize patient care and even more so if recorded in a detailed, structured manner”

TL

“Having access to the source data, how it was converted, by whom and having it placed in context will greatly increase the effectiveness and transparency when applying Big Data technologies.”

TL

“Big data is like teenage sex: everyone talks about it, nobody really knows how to do it, everyone thinks everyone else is doing it, so everyone claims they are doing it...”

Dan Ariely

“The current data collection methods: clinical trials, clinical registries and routine clinical data, all have their use in medical research as described in Chapter 2. All of these sources are a valuable source of information to innovate health care, and instead of viewing them as competing – as is sometimes postulated, they should be valued as complementary.”

TL

“In the future, we would like to move to a system where the Mapping Service will become obsolete, because the delineation labels will be based on a proper terminology and every clinician in the world will use the same guidelines. However, we have to acknowledge that this might never be achieved because it requires a level of consensus which is rarely reached in medicine.”

TL

“The mind can be convinced but the heart must be won”

Simon Sinek

“Technology alone cannot drive innovation in health care. Chapter 5-7 all demonstrate that the success lies in the combination of technology and human interaction.”

TL