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## Novel insights into old anticancer drugs

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### Citation

Zanden, S. Y. van der. (2021, March 2). *Novel insights into old anticancer drugs*. Retrieved from <https://hdl.handle.net/1887/3135058>

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**Title:** Novel insights into old anticancer drugs

**Issue date:** 2021-03-02

## STELLINGEN

behorende bij het proefschrift:

### **‘Novel insights into old anticancer drugs’**

1. Evaluating old anticancer drugs with modern technologies lead to better understanding of their activities. (*this thesis*)
2. Doxorubicin has multiple biological activities beyond DNA damage. (*this thesis*)
3. Introducing a small chemical modification can have major biological consequences. (*this thesis*)
4. Uncoupling the side effects from the anticancer efficacy of doxorubicin is possible by separating its biological activities. (*this thesis*)
5. Anthracycline variants with only chromatin-damaging activity remain active anticancer drugs. This challenges the concept that doxorubicin act primary by inducing DNA double-strand breaks. (*this thesis*)
6. Precision medicine and immunotherapy are complementary, but will not replace conventional chemotherapy to cure cancer.
7. We have become much better in treating cancer patients, but not necessarily better at improving the quality of life of cancer survivors. The latter should become a more important aspect in the development of novel cancer therapeutics. (*adapted from Bill Bryson, The body*)
8. The first step in discovery is to know what is unknown.
9. The good thing about science is that it's true whether or not you believe in it. Science, as a base, is always true, regardless of your opinion. It is the interpretation that imparts human error. (*adapted from Neil de-Grasse Tyson, The Colbert Report*)
10. Dogmatic thinking obstructs scientific progress.
11. Als je het niet meer trekt, moet je duwen.