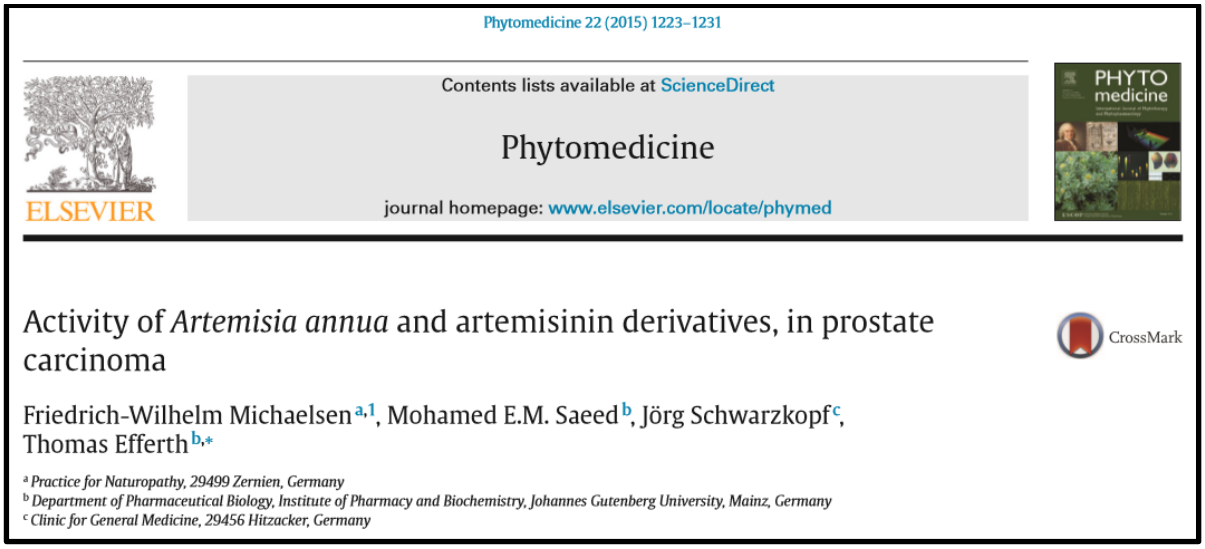

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Contents lists available at ScienceDirect

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Activity of *Artemisia annua* and artemisinin derivatives, in prostate carcinoma

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DISEASE: Human prostate carcinoma

LOCATION: Germany

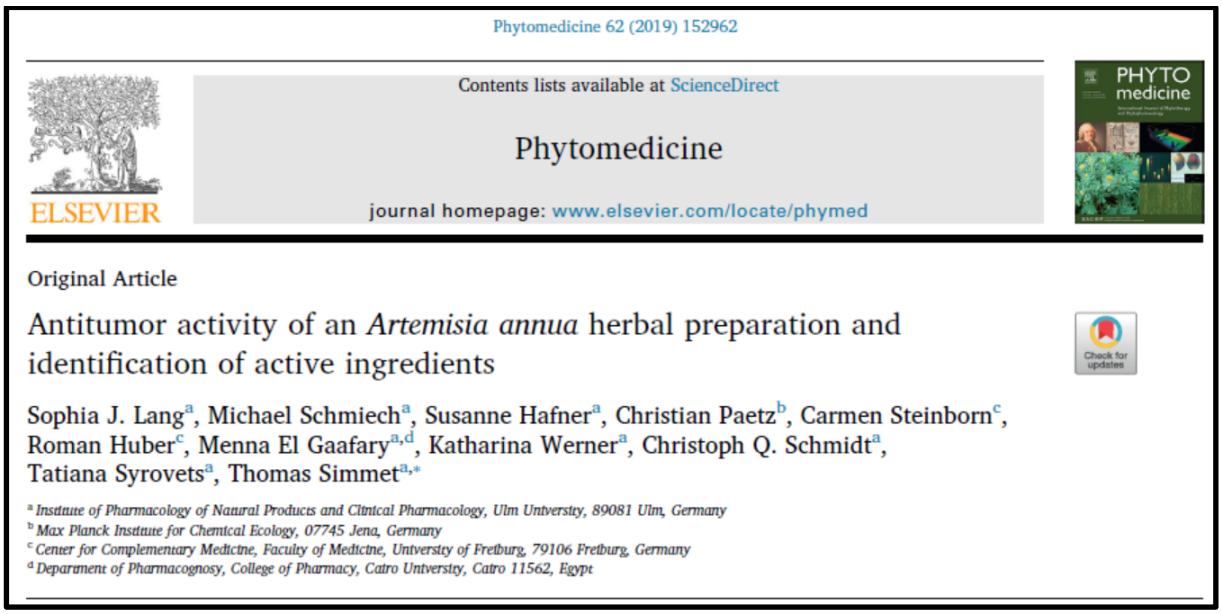
STUDY SUBJECT: One 80 year old man

TREATMENT: A. annua capsules (5x50 mg/day) long term (following short term treatment with bacalitumide)

RESULT: combined with the short-term treatment, "**resulted in considerable regression of advanced metastasized prostate carcinoma**"

QUOTING THEIR CONCLUSION: "Long-term treatment with A. annua capsules combined with short-term bicalitumide **treatment resulted in considerable regression** of advanced metastasized prostate carcinoma. Controlled clinical trials are required to evaluate the clinical benefit of A. annua in prostate cancer."

LINK:
https://www.sciencedirect.com/science/article/pii/S0944711315003323?via%3Dihub



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Original Article

Antitumor activity of an *Artemisia annua* herbal preparation and identification of active ingredients

Sophia J. Lang[a], Michael Schmiech[a], Susanne Hafner[a], Christian Paetz[b], Carmen Steinborn[c], Roman Huber[c], Menna El Gaafary[a,d], Katharina Werner[a], Christoph Q. Schmidt[a], Tatiana Syrovets[a], Thomas Simmet[a,*]

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DISEASE: Triple-negative breast cancer

LOCATION: Germany

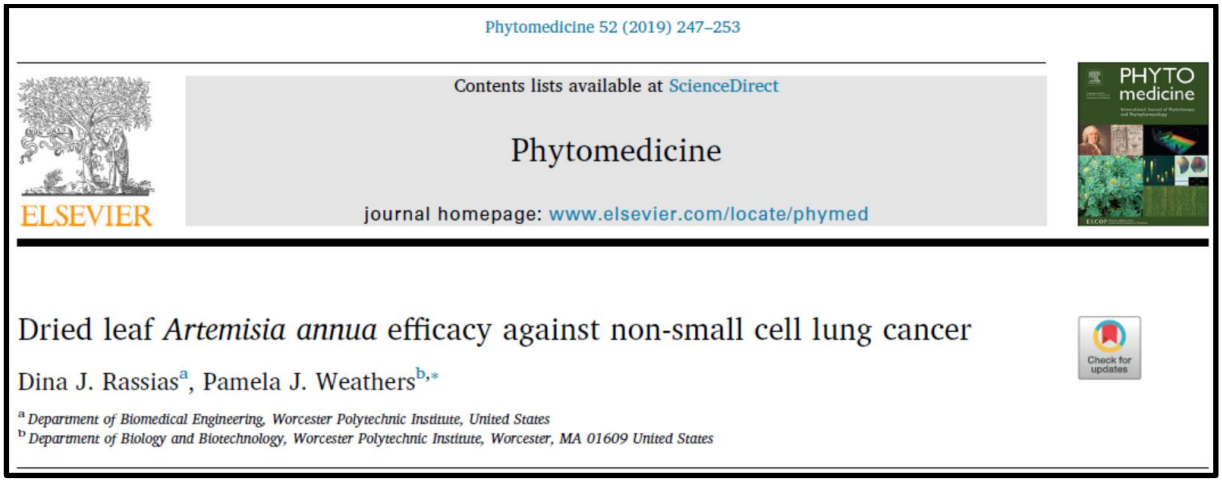
STUDY SUBJECTS: Cell and Mouse-Xenograph study

TREATMENT: Artemisia annua aqueous and acetonitrile-treated extract

RESULT: The *Artemisia annua* extract was found to be cytotoxic to a variety of treatment-resistant cancer cell lines derived from different tissues, although with different sensitivity, in both cells and mice. **Daily treatment of mice with xenografted breast cancer for 3 weeks *slowed tumor growth* to a similar extent as the standard chemotherapeutic doxorubicin**. Doxorubicin is highly toxic, resulting in body weight loss in mice – **this was not observed in mice**, where overall **much lower systemic toxicity was observed**.

QUOTING THEIR CONCLUSION: "This study provides evidence for an **anticancer activity of an *Artemisia annua* extract** marketed as a herbal preparation. Together, the results reveal new insights of *Artemisia annua*-derived compounds, their potential efficacy in anticancer therapy, and uncover compounds beside with **activity against highly metastatic triple negative human breast cancer cells** that are different from artemisinin. In addition, the study provides evidence for therapeutically active compounds in a herbal preparation. **These findings justify further exploration** of these compounds for therapeutic purposes."

LINK: https://www.sciencedirect.com/science/article/pii/S094471131930131X



Phytomedicine 52 (2019) 247–253

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Dried leaf *Artemisia annua* efficacy against non-small cell lung cancer

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DISEASE: Non-Small Cell Lung Cancer

LOCATION: USA

STUDY SUBJECTS: Cell and Mouse-Xenograph study

TREATMENT: Artemisia annua aqueous and acetonitrile-treated extract

RESULT: Dried leaf **Artemisia annua suppressed cancer cell viability** with no inhibition of healthy human cells and **inhibited cancer cell migration**. In the mouse xenographs, A. annua treatment resulted in **inhibited tumor growth by 50%** compared to controls.

QUOTING THEIR CONCLUSION: "To our knowledge this is the first study showing dried leaf ***Artemisia annua*** **(DLA) inhibited tumor growth**. Using DLAe to study mechanism, we showed that DLAe is cytotoxic to human NSCLC cells and mechanistically similar to AS by **slowing proliferation**, stimulating cell cycle arrest and inducing apoptosis. DLAe also **inhibited migration** of A549 and PC9 NSCLC cells. Moreover, DLA inhibited A549 and PC9 induced tumor growth, whereas AS only inhibited A549 tumor growth. Together these results suggest **DLA is a novel therapeutic for possible treatment of NSCLC** and potentially other AN-sensitive cancers."

LINK:
https://www.sciencedirect.com/science/article/abs/pii/S0944711318304483?via%3Dihub