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Research and Practice Initiative “KIG BaWü”- Complementary and Integrative Health Care Provision for Baden-Württemberg

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Research and Practice Initiative “KIG BaWü”- Complementary and Integrative Health Care Provision for Baden-Württemberg



Founded
in 2016

Akademisches Zentrum für
Komplementäre und Integrative Medizin

Spokeswoman:
Prof. Yvonne Samstag
www.azkim.de



Founded
in 2017

Spokesman:
Dr. Thomas Breitkreuz
www.kim-bw.de



Basic Research and Clinical
Studies

KIG BaWü



Baden-Württemberg

MINISTERIUM FÜR SOZIALES UND INTEGRATION



Patient Care



Aim of the Research and Practice Initiative “KIG BaWü”

- **“One Medicine”:**
one person – one patient-centered
human medicine
- **Complementary and Integrative
Health Care:**
Conventional and complementary
medicine “hand in hand”
- **On a scientific basis:**
 - Basic Biomedical Research
 - Clinical Trials
 - Health Care Research



Naturopathy
Complementary Medicine



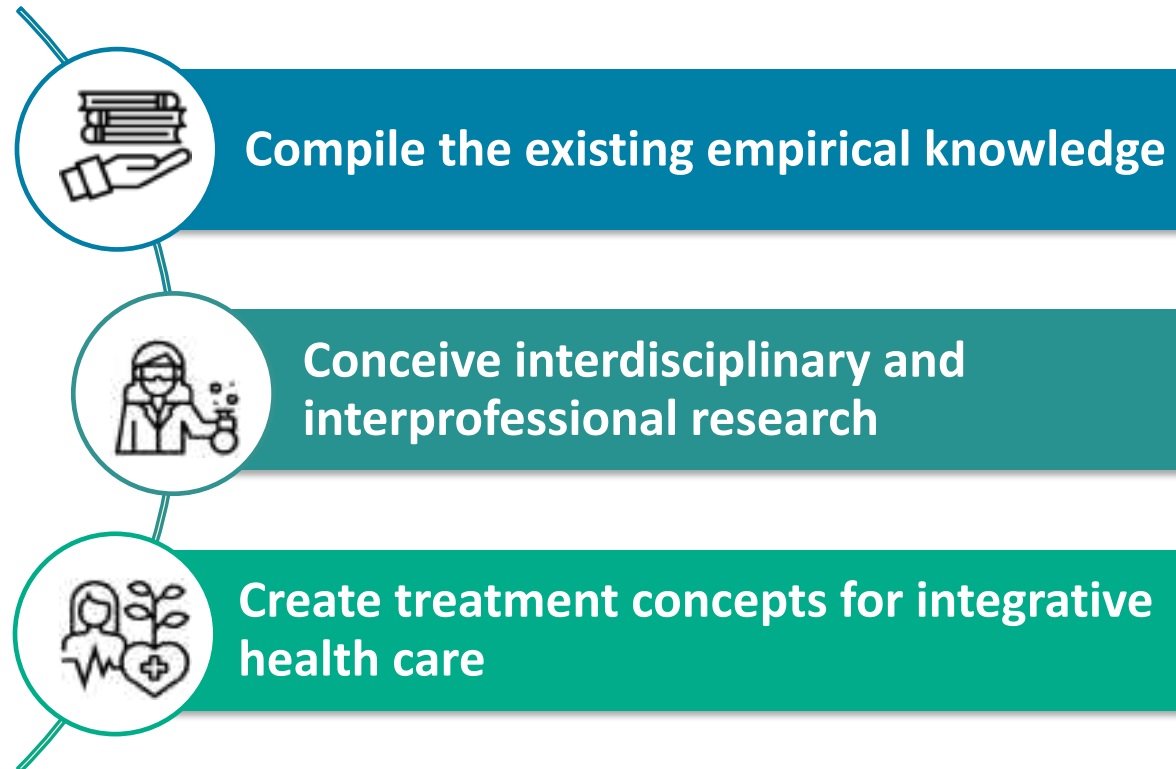
Conventional
High-Tech-Medicine



FOCUS: Cancer and immune system

Diseases

- Infectious diseases
- Chronic inflammatory diseases
- Cancer
- Chronic stress



Added value of KIG BaWü

Strengthening citizen satisfaction through patient-centered human medicine

- Respect citizens' desire for diversity in health care
- Enable comprehensive patient-centered advice
- Strengthen self-management

Cost reduction

- Focus on salutogenesis (maintaining health / self-healing powers)
- Strengthen the immune balance to stop disease progression

Quality assurance through modern interdisciplinary research and education

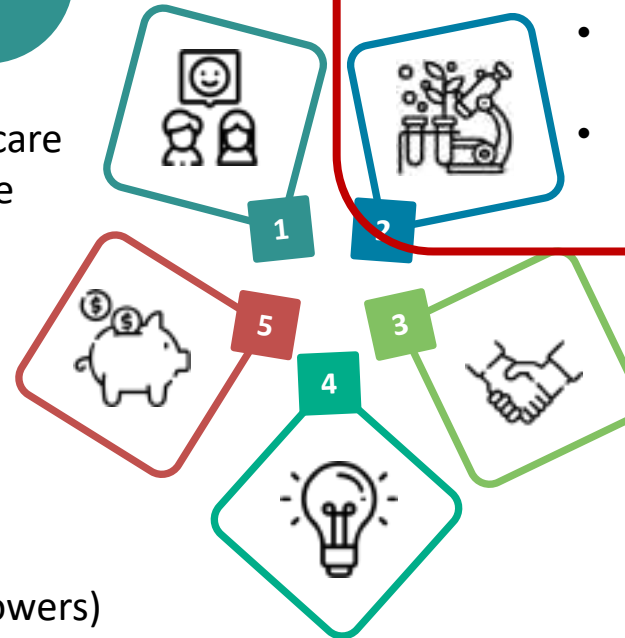
- Translational research on the effects of complementary medicine methods
- Qualification of young professionals (academic teaching, research training groups)

Improved quality through interprofessional training and patient care

- Strengthen cooperation between all health professions
- Promote respect and team-spirit

Take advantage of new developments

- Digitalisation
- Personalised medicine



* May 2016



Baden-Württemberg

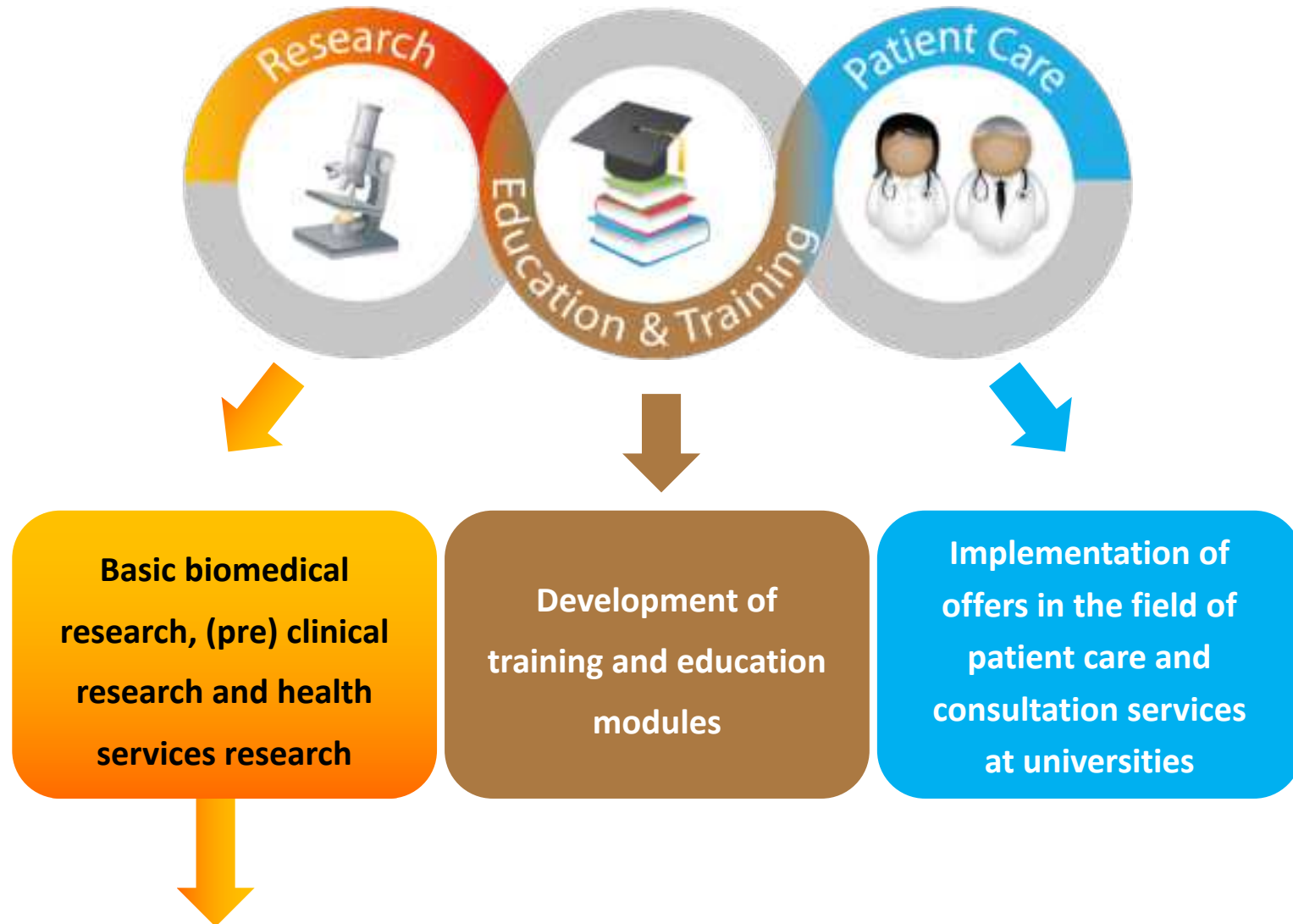
MINISTERIUM FÜR SOZIALES UND INTEGRATION






Physicians and scientists at four university hospitals in Baden-Württemberg, Germany



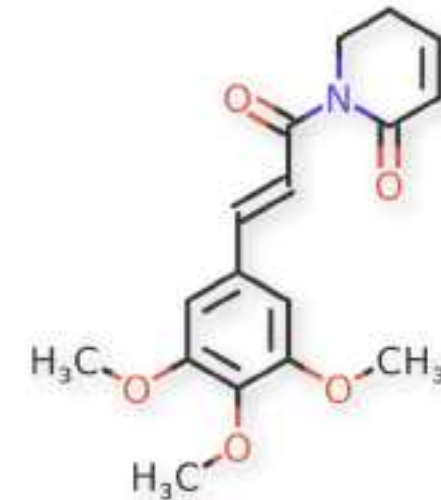
AZKIM: Integrative Medicine in Baden-Württemberg, Germany



Biomedical Basic Research Clinical Trials Health Care Research		
		
Herbal active agents	Nutrition	Acupuncture
Basic research	Clinical trial	Clinical trial
e.g. Piperlongumine (<i>Piper longum</i>) in cancer and inflammatory diseases - and others	Effect of Vegan diet on parameters of the immune system which are relevant for rheumatoid arthritis	Effect of Acupuncture on chronic stress and the immune system
Liang et al., Frontiers Immun. 2020 Liang et al., Frontiers Immun. 2019	Lederer et al., Clin. Nutr. 2020 Lederer et al. , Nutrients 2019	Wild et al., PLoS One 2020

Piperlongumine (Piplartine)

Natural amide alkaloid present in *Piper longum* Linn
(long pepper)



<https://drugs.ncats.io/drug/SGD66V4SVJ>

Long pepper (Pipali, *Piper longum* L.):

- A spice in Asian dishes
- A medical plant used in the Ayurvedic medicine

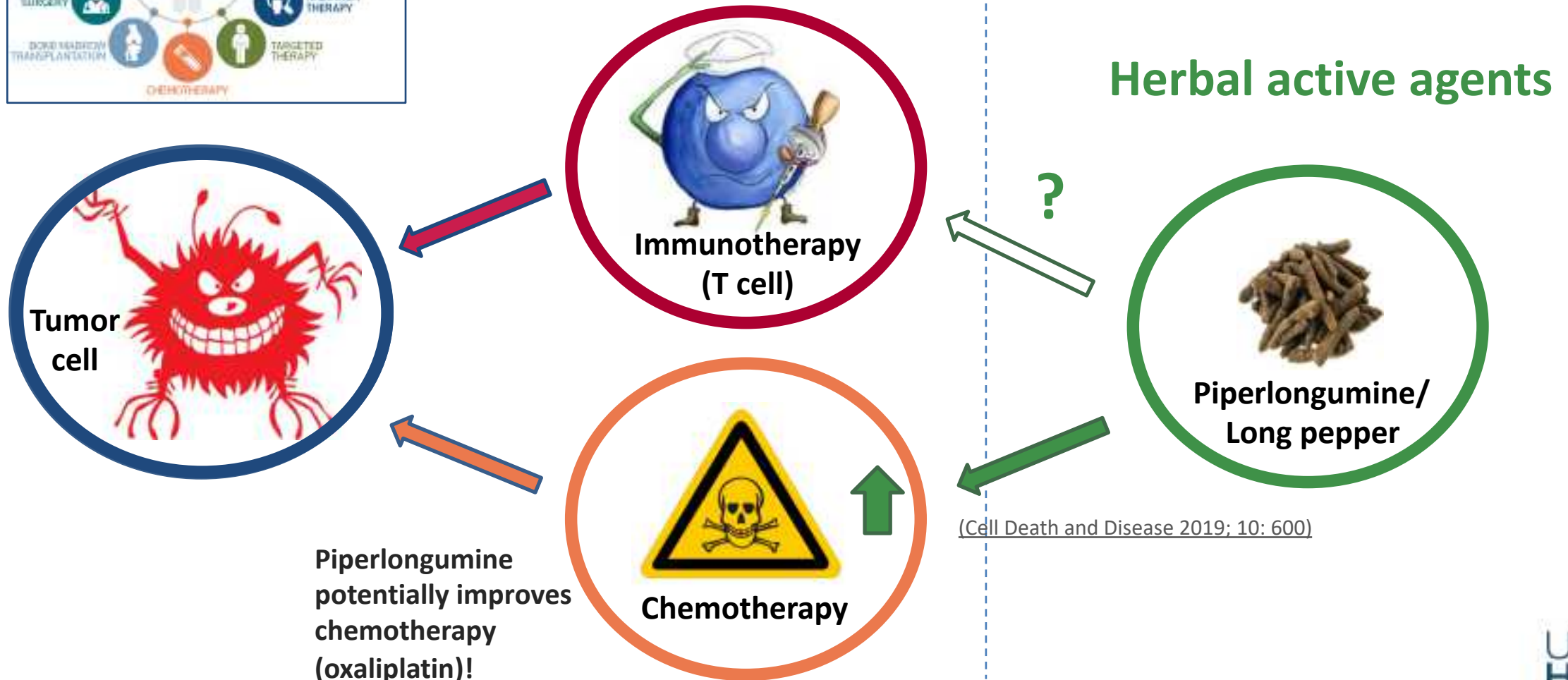
Could it play a role in integrative oncology?

Cancer Therapy

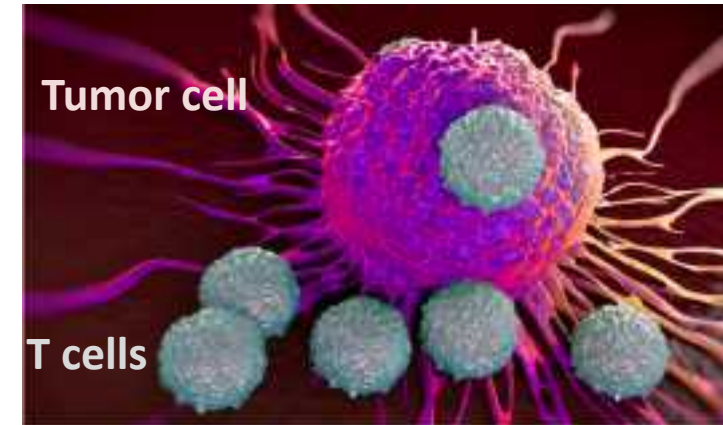
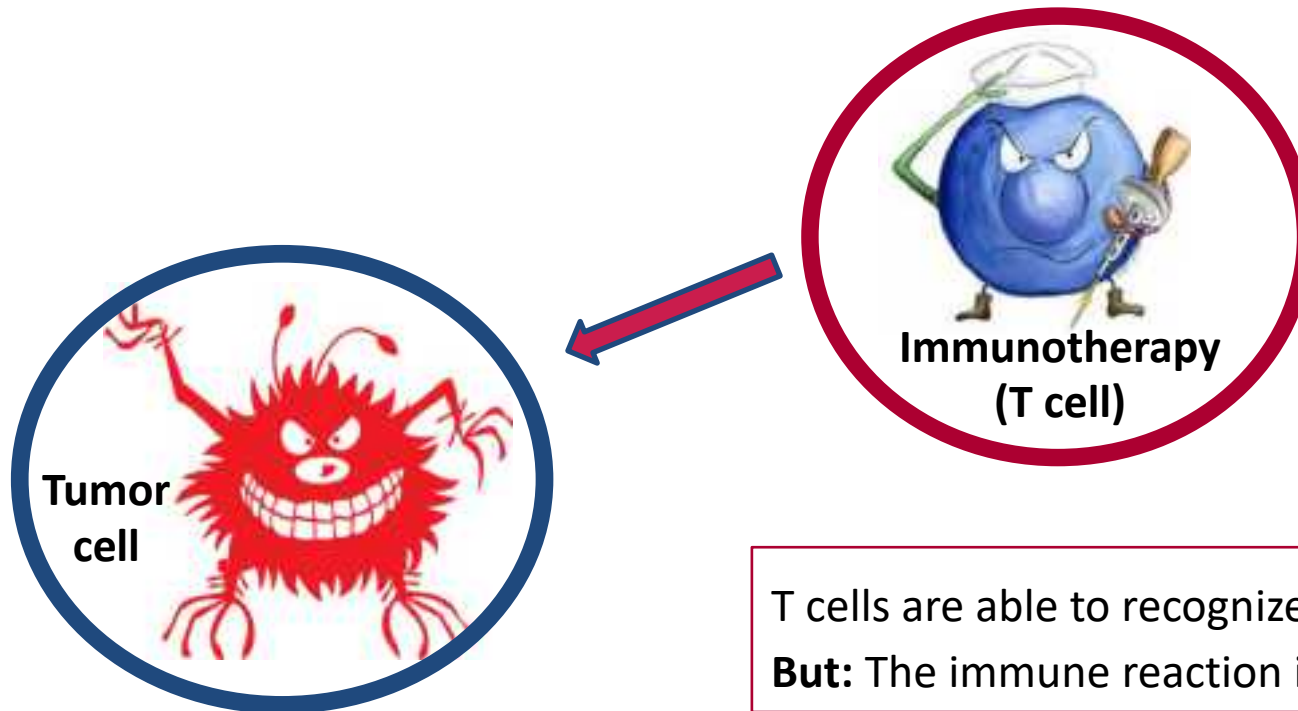


<https://www.houstonmethodist.org/cancer/treatment-options/>

Integrative Oncology



Immunotherapy of Cancer



<https://www.drugtargetreview.com/news/55206/new-t-cell-therapy-could-provide-universal-cancer-treatment/>

T cells are able to recognize and destroy tumor cells

But: The immune reaction is often too weak to eradicate the tumor

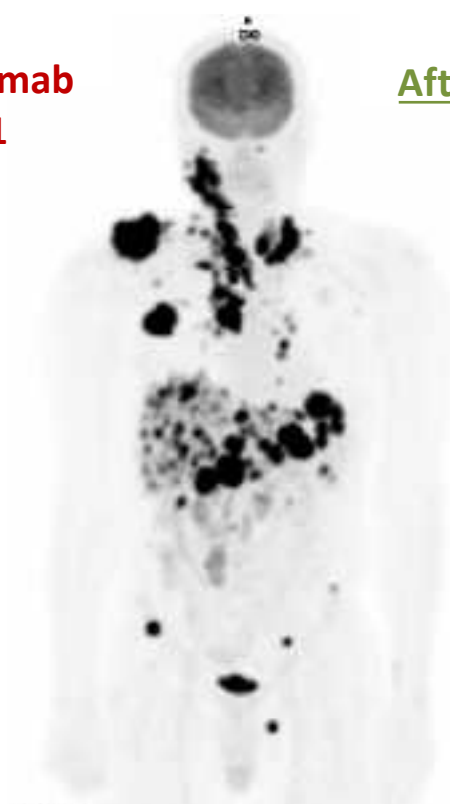
Immunotherapy with Checkpoint inhibitors

Principle: antibodies that „release the brakes“ of the T cells resulting in an enhanced killing of tumor cells by T cells

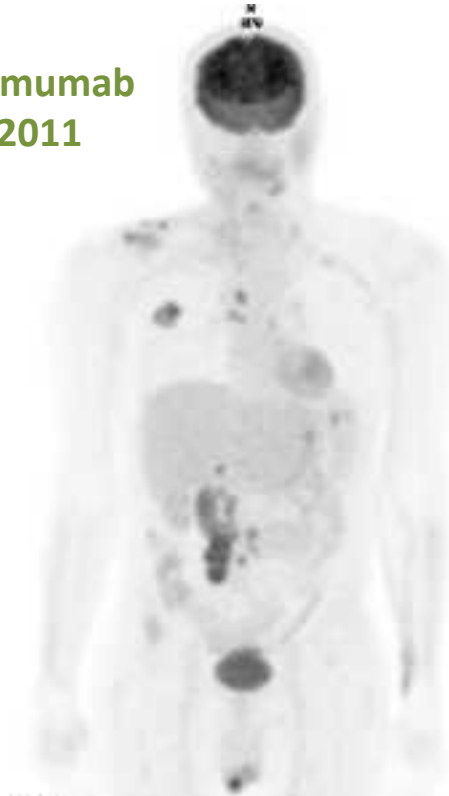
Immunotherapy of Cancer: Checkpoint Inhibitors

„releasing the brakes“: Enhanced killing of tumor cells by T cells

Before Ipilimumab
22.04.2011



After Ipilimumab
05.08.2011



Nobel price in medicine 2018



Tasuko Honjo



James P. Allison

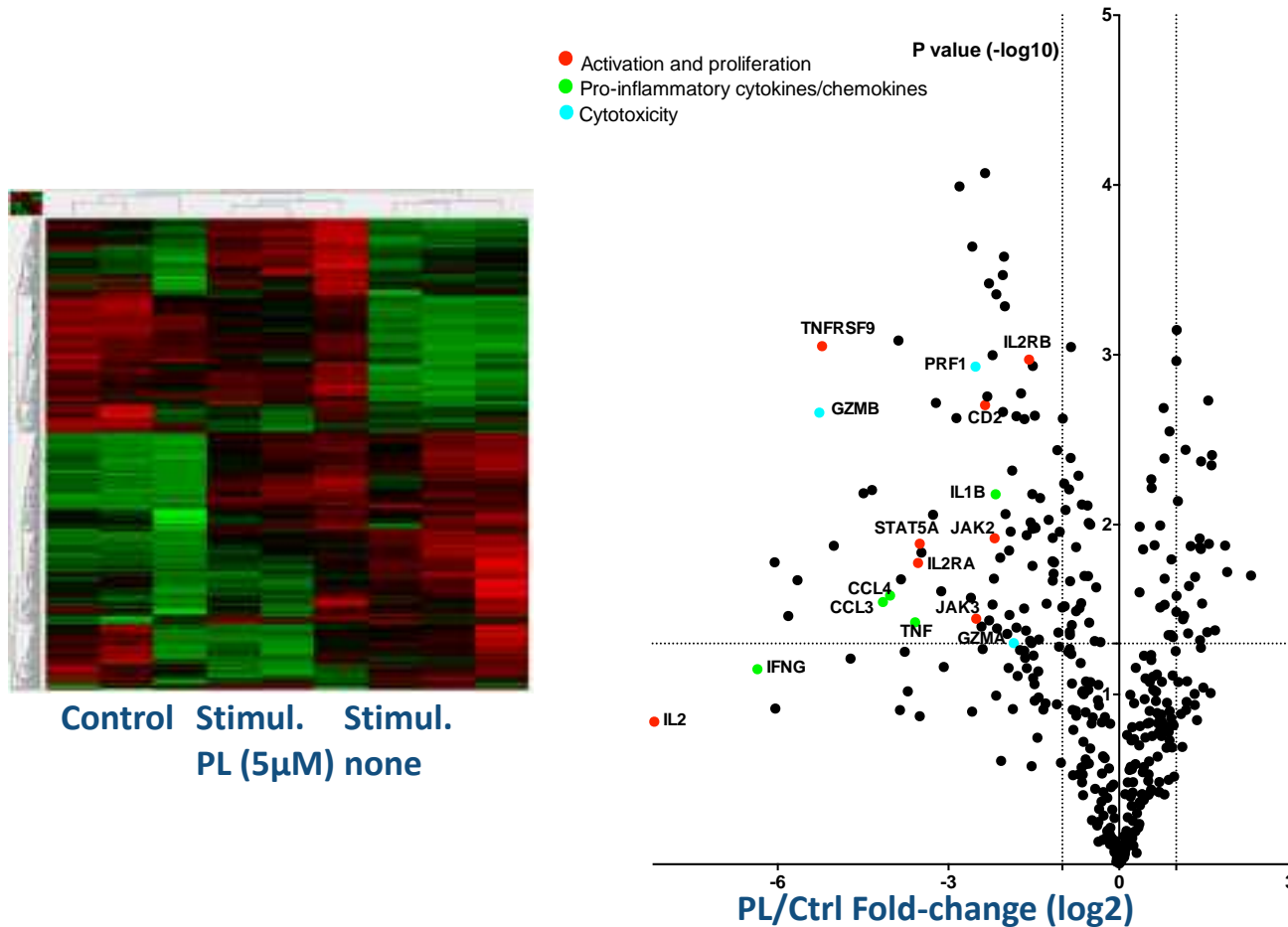
*for their discovery of cancer therapy
by inhibition of negative immune
regulation*

Metastatic Melanoma: Response to Ipilimumab (anti-CTLA-4)

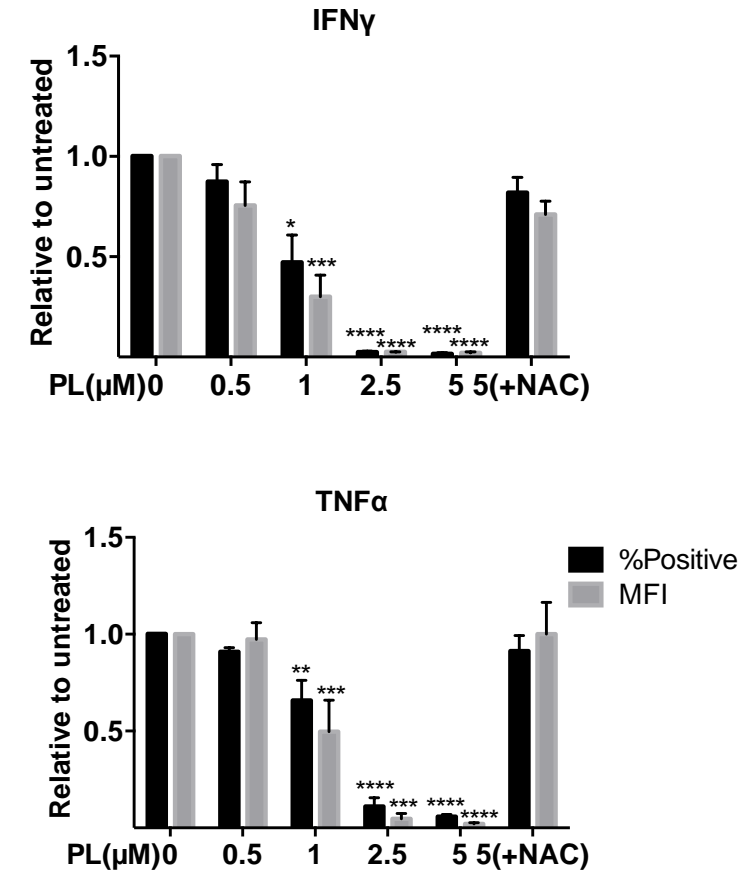
Figure: Flaherty KT, Puzanov I, Kim KB, et al. Inhibition of mutated, activated BRAF in metastatic melanoma. *N Engl J Med.* 2010;363(9):809–819

Piperlongumine acts as an immunosuppressant on primary human T cells

A Gene expression profile (nCounter: 600 genes)

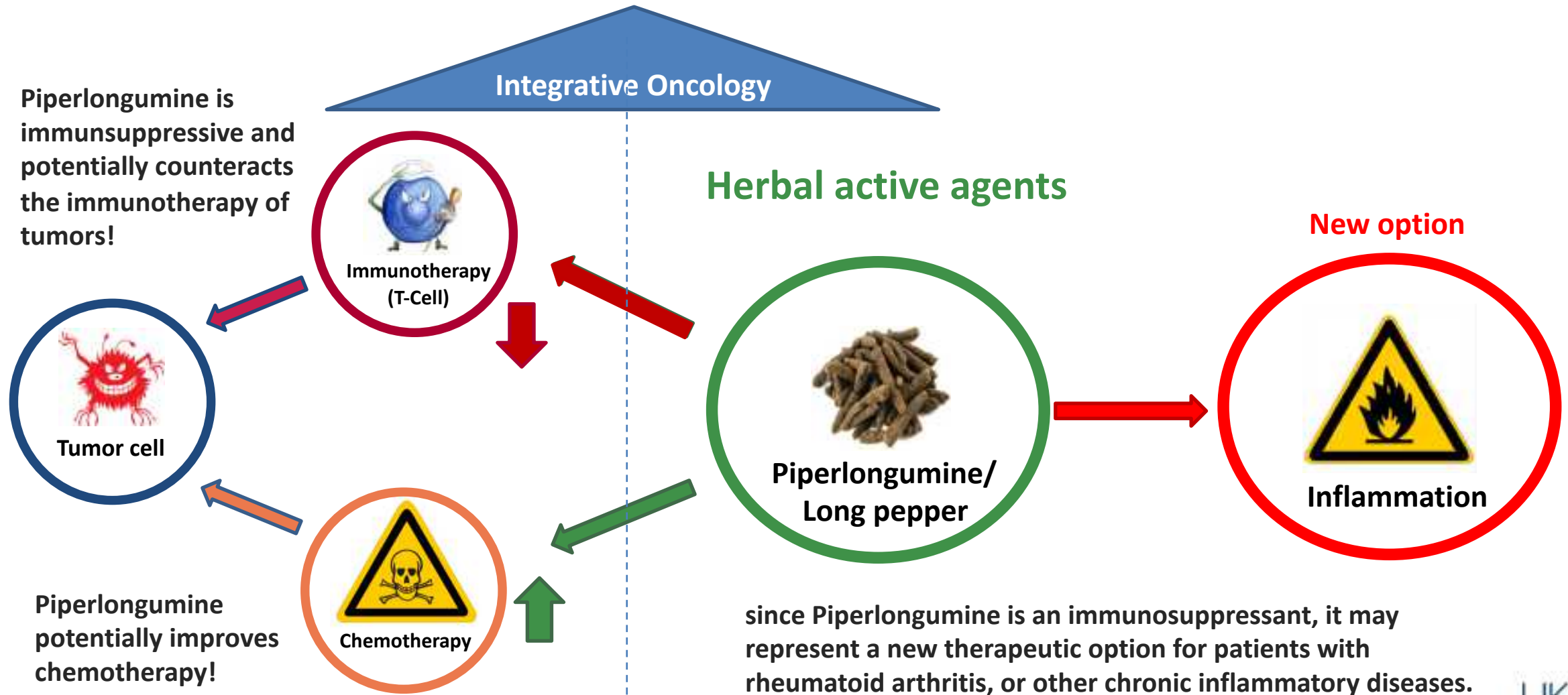


B Pro-inflammatory cytokines



Liang et al., Frontiers in Immunology 2020

Summary Piperlongumine



Financing Research in the field of Complementary and Integrative Medicine (CIM)



Public funding is hardly available for independent CIM research

Why?

Lack of acceptance

- Sound scientific data from evidence-based studies is generally missing > **AZKIM / KIG BaWü**
- Mechanisms and effects are often vague > **AZKIM / KIG BaWü**
- Risk of interference with “conventional” medicine > **AZKIM / KIG BaWü**
- Integrative medicine rarely represented in funding organisations > **TO DO !!!**

Take home messages

- **We have new and highly sensitive research tools to investigate Integrative Medicine**
- **It is time for a strategy dialogue to combine our efforts**
- our goal: “one patient-oriented human medicine” !

Thank you!



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Baden-Württemberg
(Germany)
for supporting and
financing
AZKIM and KIM

as



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And all my co-workers and (collaboration) partners inside and outside of KIG BaWü

