

Krebs
Cancer
Cancro

Nationale Strategie gegen Krebs
Stratégie nationale contre le cancer
2014–2020



Alpine Tumor Immunology Registry – alpineTIR

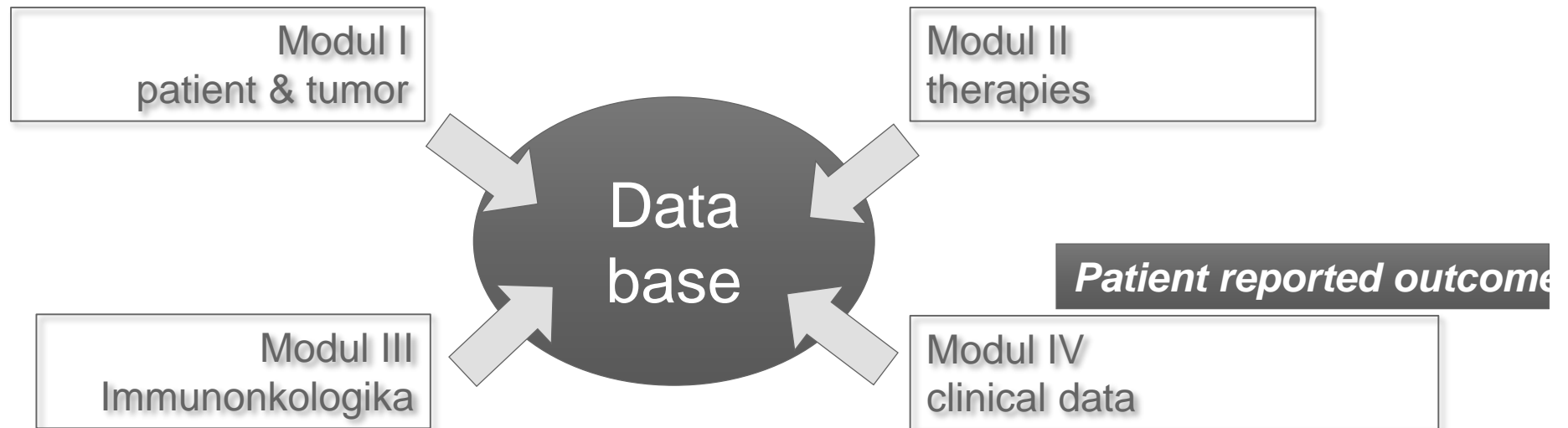
SAKK 80/19

Ulf Petrausch

Alpine Tumor Immunology Registry

- **2015** immune-modulating drugs against cancer became more and more part of standard of care
- Only experience from clinical trials available in regards to:
 - Management of toxicities
 - Efficacy
 - Treatment landscape
- **Aim: To build and run a clinical registry:**
 - Generation of medical knowledge
 - Publications and poster presentations for SAKK Network
 - Data collection at the centers

Patients who received IDAC (immune-modulating drugs against cancer)



Development

- 6 sites (OnkoZentrum Zürich, Kantonsspital Chur, Stadtspital Waid, Onkozentrum Hirslanden, Spital Sursee, Feldkirch)
- Supported by Roche, MSD, BMS, AstraZeneca & Pfizer
- Advised by EvaluScience and Advocacy
- Approved by ethical committee 2017
- Continued by SAKK from 2020 as study SAKK 80/19
- PI: U. Petrausch, Supporting-PI: T. Winder
- Expand to all SAKK sites interested starting 2020

Parameters

- per entity/group (e.g. patients with CNS metastases)
 - Overall survival
 - Progression free survival (per line of therapy)
 - Number of lines of therapies
 - Sequential therapies
 - Dosing of IDAC
 - Concomitant therapies (Chemo, Radio, surgery ...)
- 300 patients retrospectively (completed)
- 700 patients will be included prospectively

Data from 305 patients collected

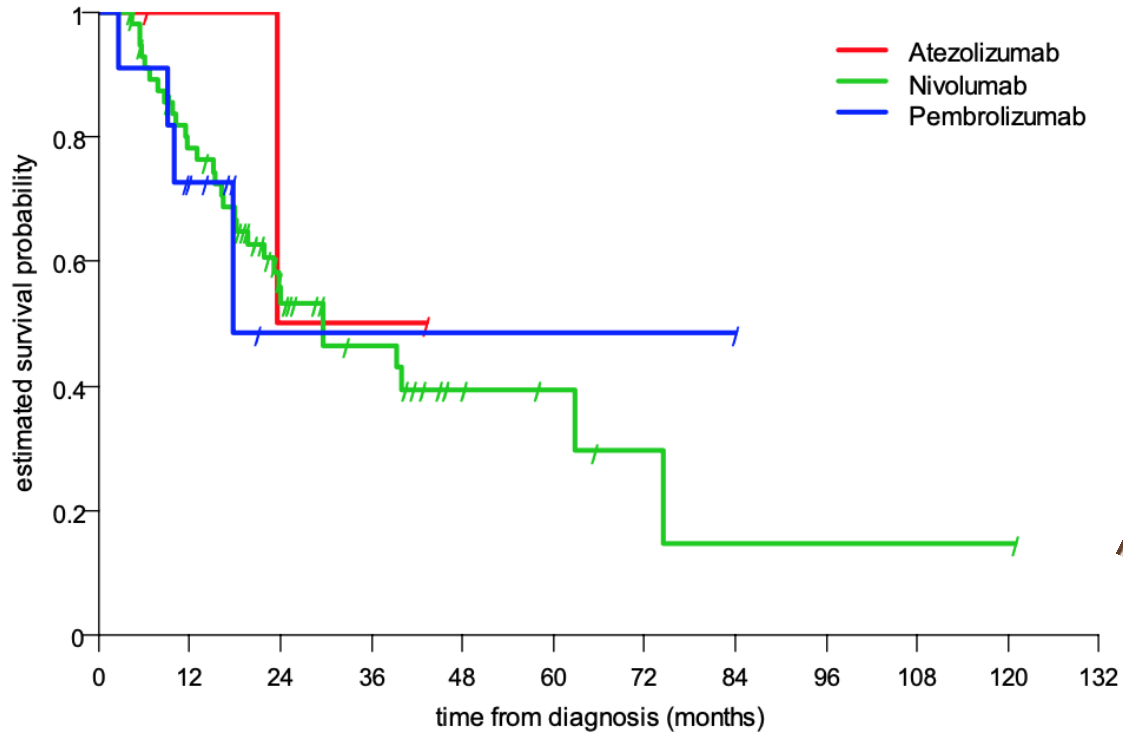
Gender	
Female	124 (40.7%)
Male	181 (59.3%)
Tumor entity	
Anal canal carcinoma	3 (1.0%)
Breast cancer	3 (1.0%)
Carcinoma of Unknown origin	1 (0.3%)
Cervical cancer	1 (0.3%)
Colorectal cancer	2 (0.7%)
Endometrial cancer	2 (0.7%)
Esophageal cancer	4 (1.3%)
Gastric cancer	9 (3.0%)
Hepatocellular carcinoma	3 (1.0%)
Hodgkin lymphoma	3 (1.0%)
Hypopharyngeal cancer	2 (0.7%)
Lung cancer	157 (51.5%)
Melanoma	47 (15.4%)
Merkel-cell carcinoma	2 (0.7%)
N/A (cancer)	3 (1.0%)
Neuroendocrine tumor	1 (0.3%)
Non-Hodgkin lymphoma	2 (0.7%)
Oral cavity cancer	1 (0.3%)
Oropharyngeal cancer	3 (1.0%)
Pancreatic cancer	9 (3.0%)
Pleural cancer	1 (0.3%)
Renal cell carcinoma	29 (9.5%)
Tongue cancer	1 (0.3%)
Urothelial carcinoma	16 (5.2%)

IDACs used

Line of first immunotherapy	
1	87 (28.5%)
2	148 (48.5%)
3	51 (16.7%)
4	10 (3.3%)
5	5 (1.6%)
6	3 (1.0%)
8	1 (0.3%)

first line immunotherapy	
Atezolizumab	17 (5.6%)
Avelumab	2 (0.7%)
Durvalumab	11 (3.6%)
Ipilimumab	4 (1.3%)
Nivolumab	160 (52.5%)
Nivolumab + 5-Fluorouracil	1 (0.3%)
Nivolumab + Carboplatin	1 (0.3%)
Nivolumab + Ipilimumab	10 (3.3%)
Nivolumab + Paclitaxel	1 (0.3%)
Pembrolizumab	93 (30.5%)
Pembrolizumab + Carboplatin	1 (0.3%)
Pembrolizumab + Erlotinib	1 (0.3%)
Pembrolizumab + Pemetrexed	1 (0.3%)
Pembrolizumab + Pemetrexed + Carboplatin	1 (0.3%)
Pembrolizumab + Trastuzumab	1 (0.3%)

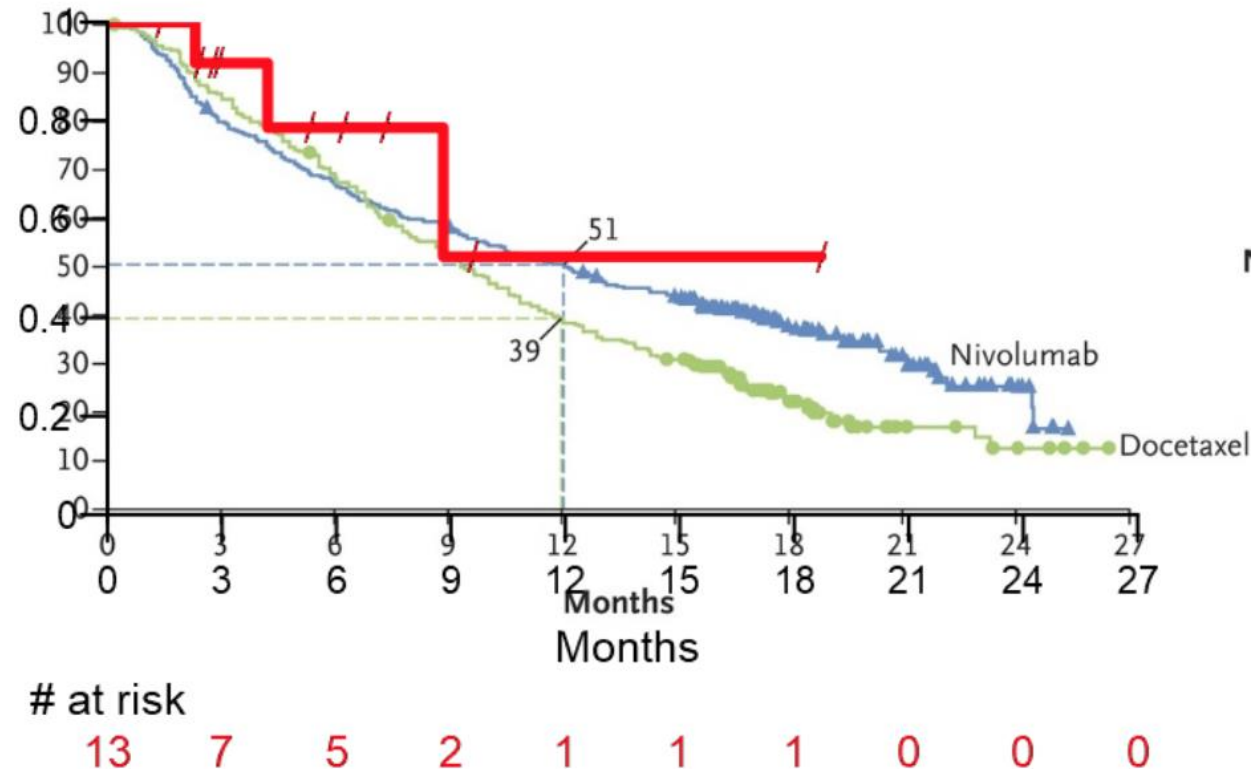
Non small cell lung cancer, second line checkpoint blockade



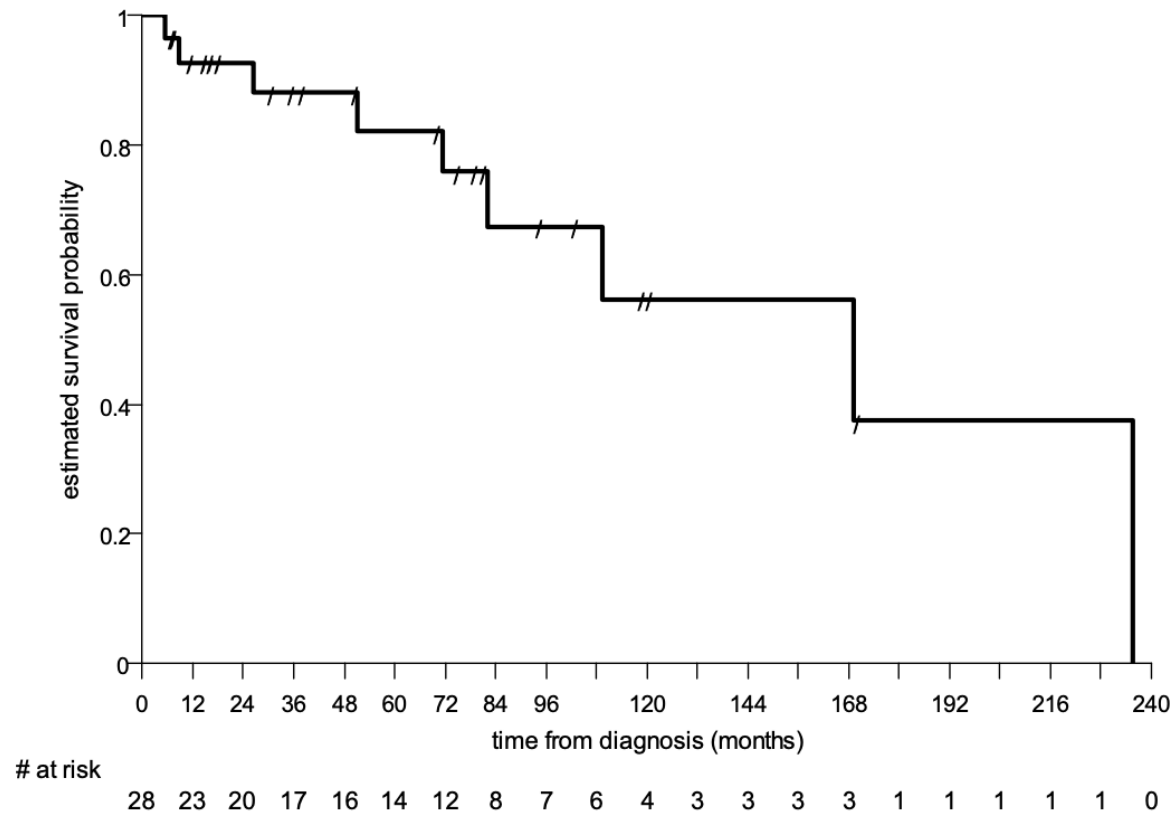
# at risk	0	12	24	36	48	60	72	84	96	108	120	132
Atezolizumab	3	2	1	1	0	0	0	0	0	0	0	0
Nivolumab	58	42	21	13	6	4	2	1	1	1	1	0
Pembrolizumab	11	6	1	1	1	1	1	0	0	0	0	0



Non small cell lung cancer, Benchmarking with Nivolumab as 2nd line checkpoint blockade



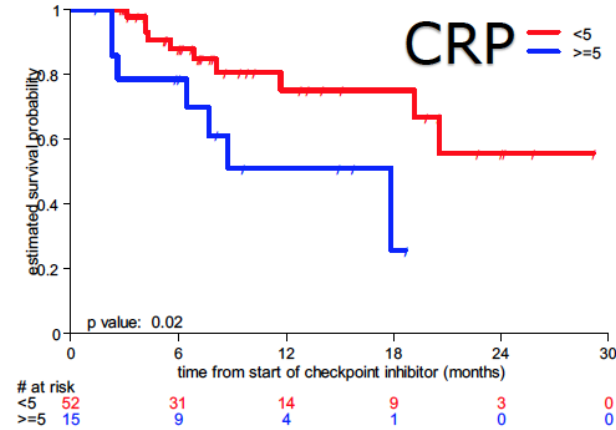
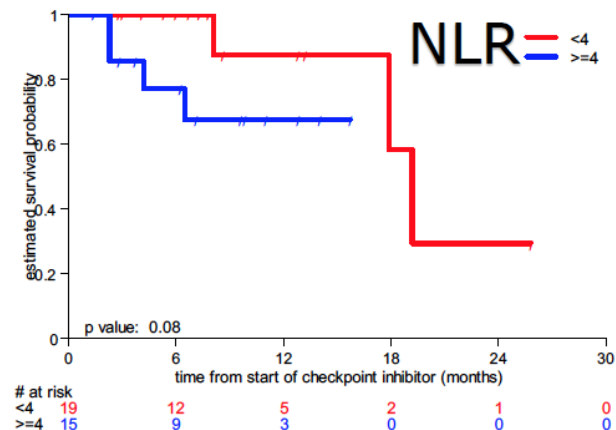
Renal cell cancer, second line checkpoint blockade



Inflammation and response to checkpoint blockade

Ratio/Value	cut-off	Number of patients	p-value (log-rank test)
NLR	4	34	0.076
MLR	0.5	34	0.08
PLR	262	34	0.24
Eosinophils	1,5%	33	0.122
CRP	1 mg/dl	67	0.066
CRP	3 mg/dl	67	0.041
CRP	5 mg/dl	67	0.022

Table 2: Summary of log-rank tests for pooled cohort.



Conclusion

- Clinical data can be collected in a registry at different sites
- So far, the data collection produce rather small subgroups
- Analysis can help to understand real world efficacy
- More centers are highly welcomed to generate larger subgroups
- Registries should be designed to exchange data to avoid redundancies and workload and maximize information
- AlpineTIR is collecting data only for IDAC patients
- Registry data can be linked to research using biological samples
- Data will be enriched by patient reported outcome