

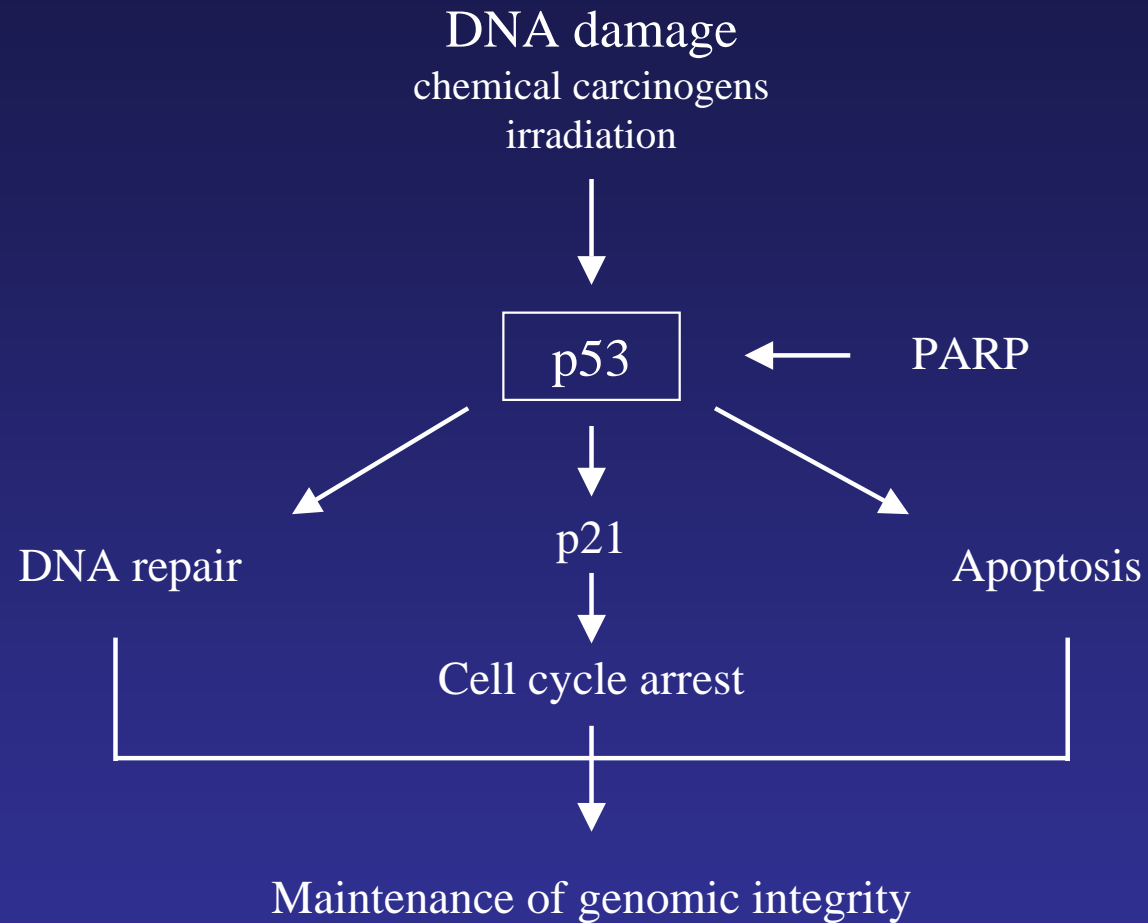
p53 Autoantibodies ELISA

actual link: <http://www.p53-autoantibodies.de>

Applicability

Diagnostic Accuracy





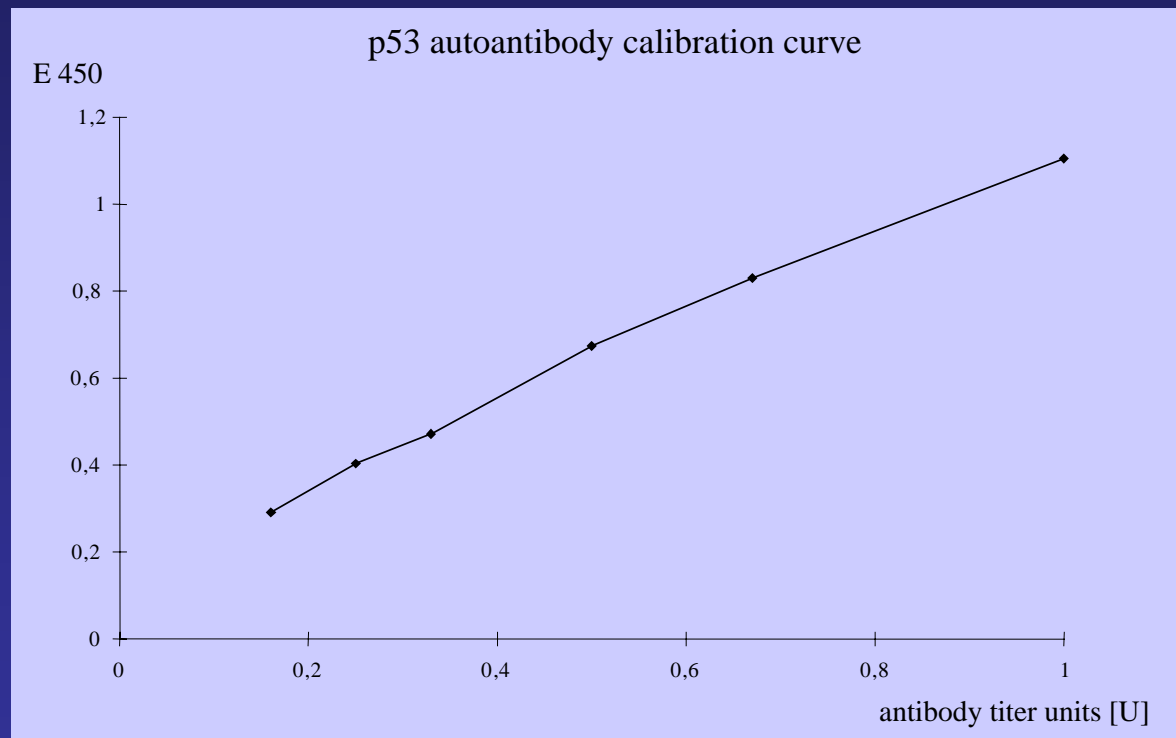
mt p53 → p53 autoantibodies

Colon cancer	30-70%	13-32%
Ovarian cancer	>50%	15-46%
Esophageal cancer		30%
Bladder cancer		20-27%
Lung cancer		8-17%

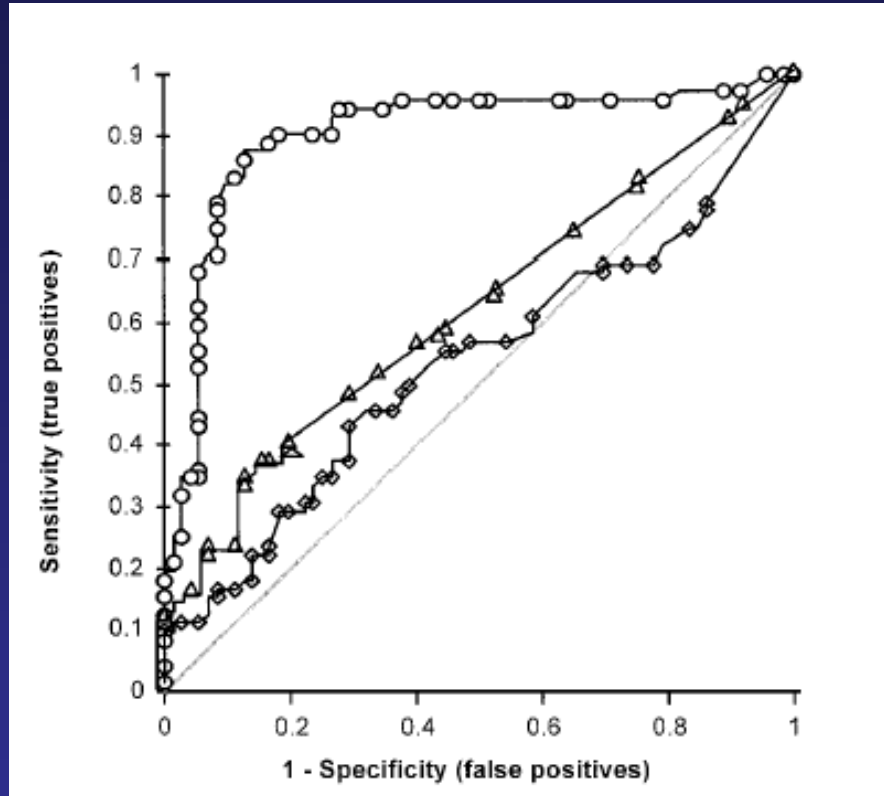
most papers report an association of p53 Aab with poor prognosis and a shorter survival.

STZ Angewandte Biologische Chemie

	dilution	absorption E ₄₅₀	titer [U]
calibrator	undiluted	1,11	1
calibrator	1 : 1,5	0,83	0,67
calibrator	1 : 2	0,67	0,5
calibrator	1 : 3	0,47	0,33
calibrator	1 : 4	0,40	0,25
calibrator	1 : 6	0,29	0,16



STZ Angewandte Biologische Chemie



72 patients with suspicion of malignancy
72 healthy blood donors

— No discrimination

Test A (AUC= 0.53)

Test B (AUC= 0.902)

Test C (AUC= 0.614)



STZ ELISA (Test B)
high true-positive rates
low false positive rates

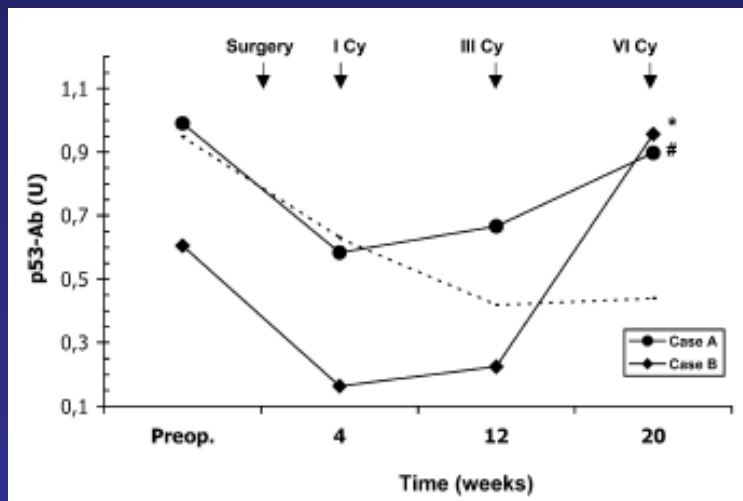
Rohayem et al. Clinical Chemistry 45; 11, 2014-16 (1999)

Colon cancer (Lechpammer et al., Int. J. Colorectal Dis., 2004)

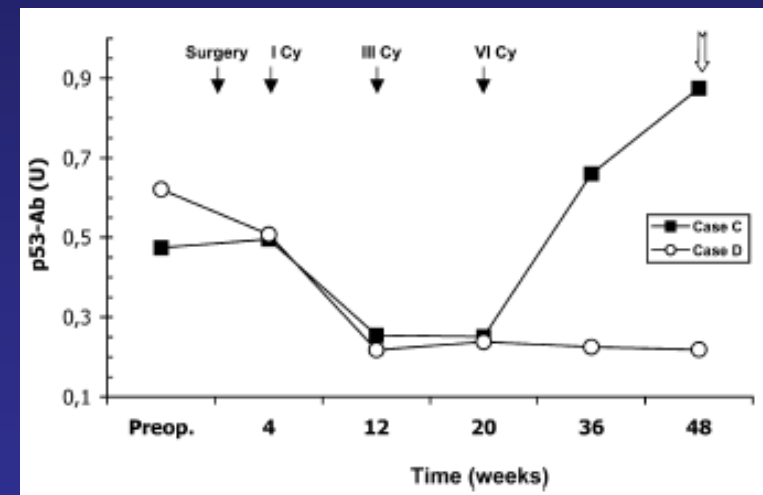
220 diagnosed with colorectal adenocarcinoma
42 controls (age and gender matched)

18% p53 Aab positive patients
no positive control

Patient monitoring



Relapse clinically conformed 20 weeks
after surgery 2/40 patients



Prolonged follow up
relapse 1/8 patients

Summary

- 100% assay specificity
- surgery alone caused a certain decrease in p53 Aab titer
- chemotherapy caused a significant decrease in p53 Aab levels
- variations in p53 Aab values throughout the chemotherapy closely reflected the clinical course of the disease .
- after the surgery clinically cancer free patients showed low p53 Aab levels
- in patients with tumor relapse, p53 Aab levels strongly and timely reflected cancer relapse

➡ p53 Aab serum concentrations reliably reflect clinical course of the disease during therapeutic manipulations

➡ valuable serological tool in patient monitoring

Applicability

colorectal carcinoma

- improvement of sensitivity
early tumour stages (Dukes' B) [19% (CEA) \Rightarrow 33% (CEA+p53)]
- patient monitoring