

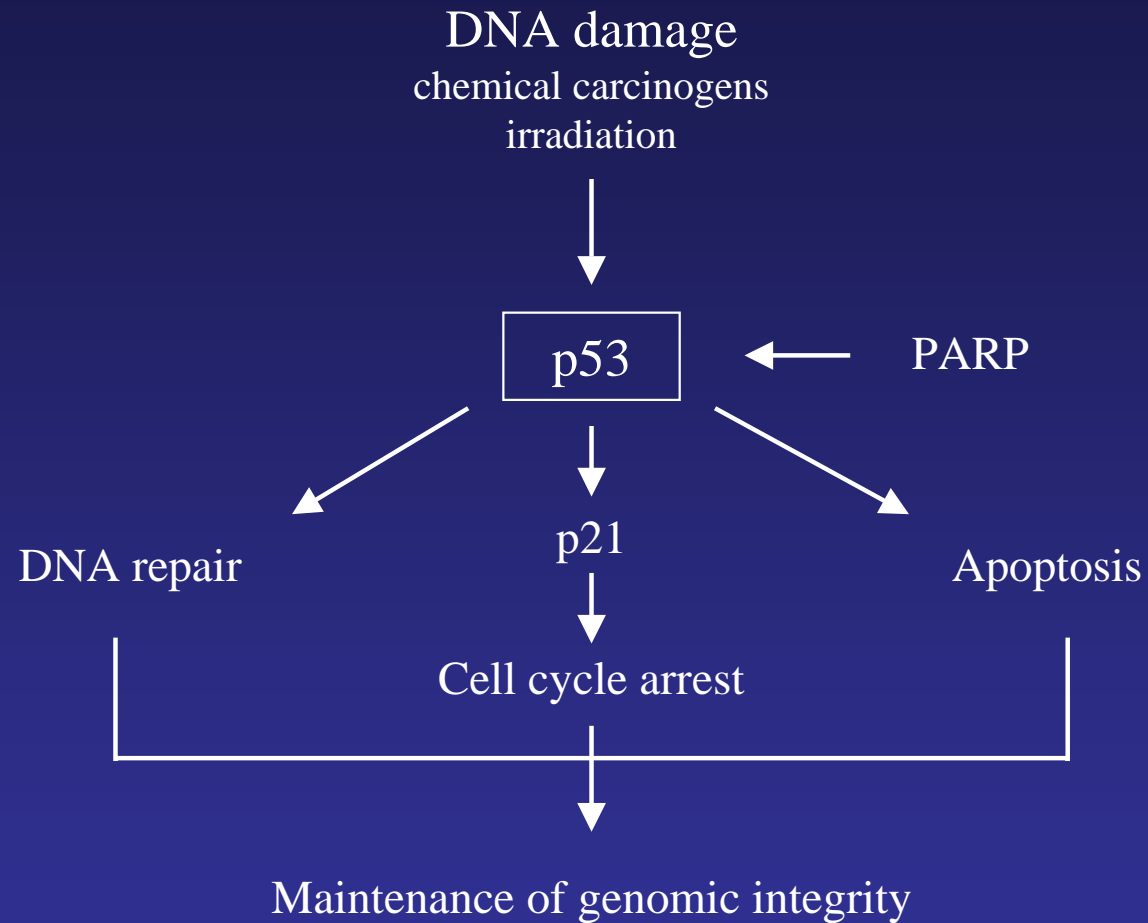
p53 Autoantibodies ELISA

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

Applicability

Diagnostic Accuracy





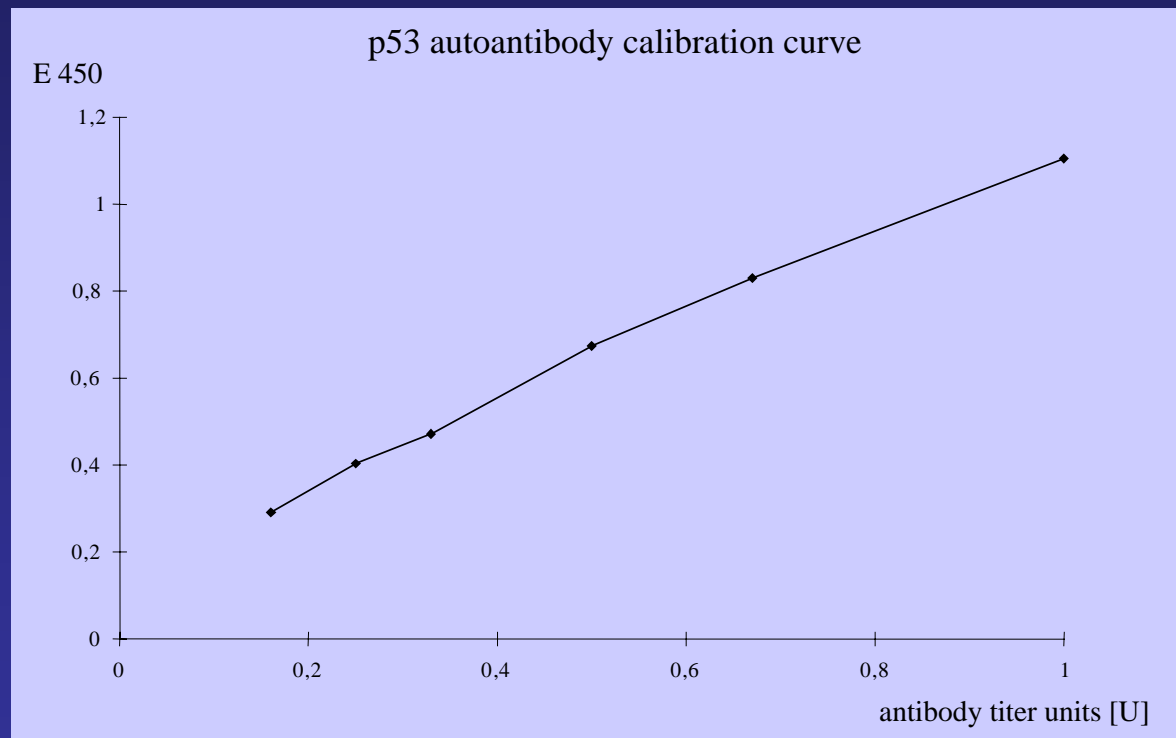
mt p53 → p53 autoantibodies

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

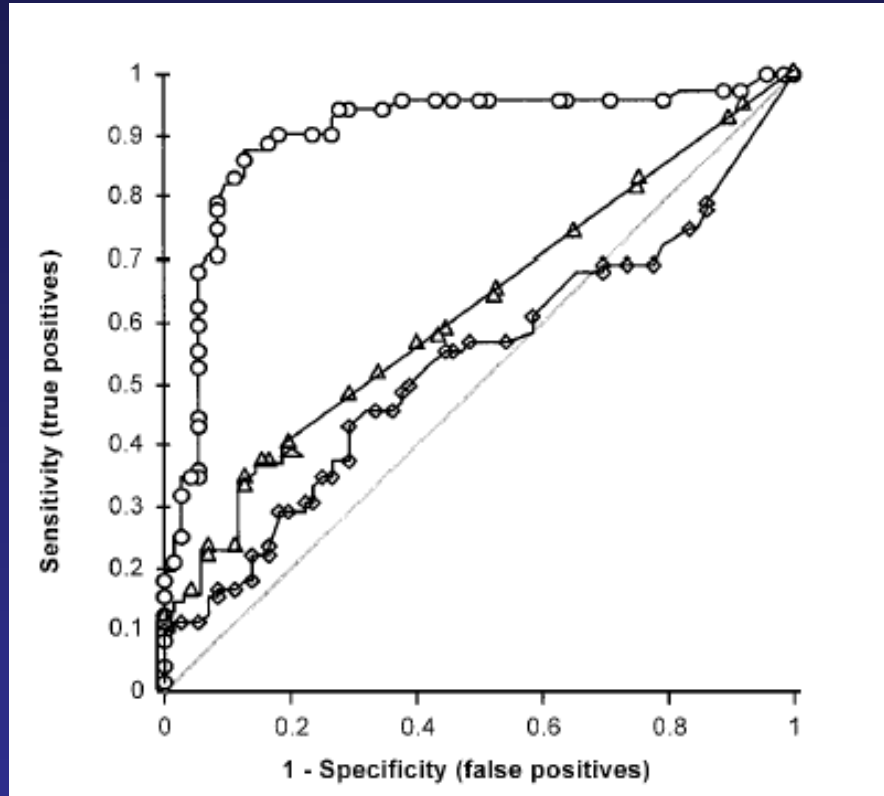
most papers report an association of p53 Aab with poor prognosis and a shorter survival.

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

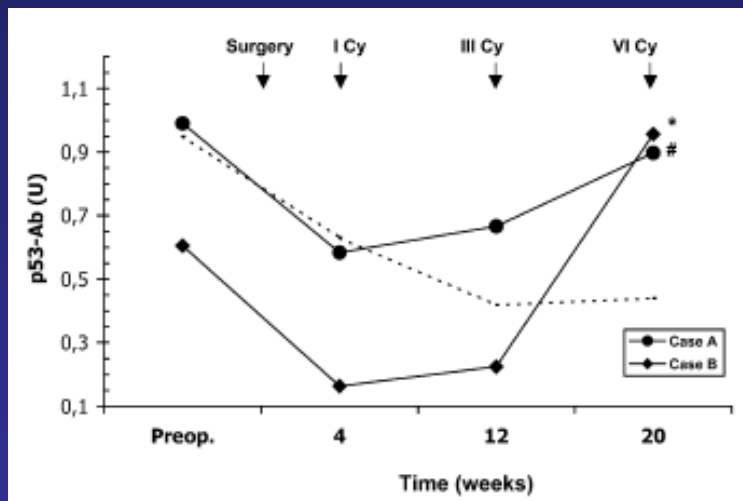
Rohayem et al. Clinical Chemistry 45; 11, 2014-16 (1999)

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

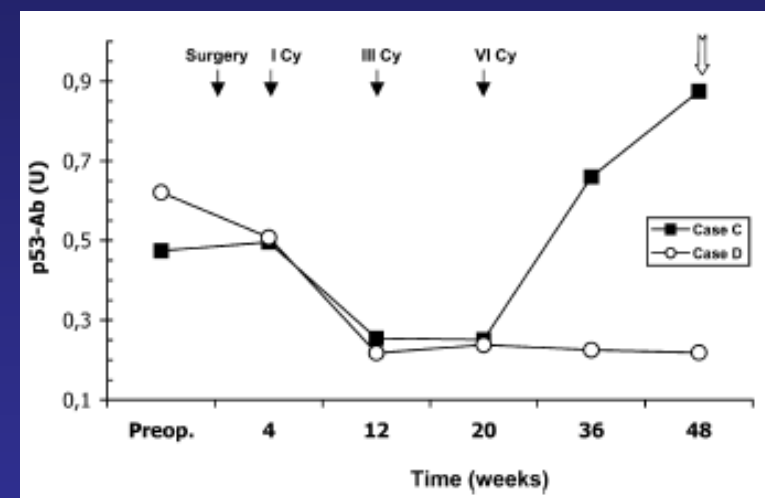
220 diagnosed with colorectal adenocarcinoma
42 controls (age and gender matched)

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