



Labor Dr. med. Ulrich Pachmann Kurpromenade 2 95448 Bayreuth

Bayreuth, 09.12.2014

Dr. XXXX

Your patient: XXXX
 Born: **06.08.1967**

Your request from: 01.12.2014
 Our Lab number: T421422

Report on Circulating Tumor Cells (MAINTRAC)

Dear Dr. XXXX,

Many thanks for sending your examination request regarding the detection of circulating tumor cells in your patient XXXX.
 Diagnosis: Neuroendocrine Carcinoma, stage 3, initial diagnosis: 07.02.2013. Post surgery 2013, post chemotherapy 2013, Complementary therapies 2014.

The laserscanning-microfluorimetry of the **epithelial cell antigen (HEA)**-positive cells with visual control (MAINTRAC) from **1 ml EDTA blood** resulted in following findings (detection limit is at 10 cells/ml):

Examination parameter	Number of potential tumor cells			Cell fragments
	In the sample	In circulation (5l) (in millions)	In addit. examination: % of HEA-pos. cells	
HEA	12 600	63		numerous

The material you sent for examination could be thoroughly evaluated.
 We found a massively increased number of vital tumor cells circulating in the blood.
 In addition, there were numerous specific **cell fragments** detected.
 Specific cell fragments occur, for example, as part of an immune response and indicate damaged cells, but also a high cell turnover.

In connection with a detected tumor the cells are most probably cells from this tumor.
 We recommend a control already in 8 weeks. If there are again high cell numbers, a change/modification of therapy should be taken into consideration.

The current cell numbers present a basic value, only an increase in cell numbers is relevant for disease progress.

You now have a **benchmark**, from which can be determined if and how the number of these cells changes in response to therapy.

With best regards,
 Dr. med. Ulrich Pachmann

PD Dr. med. Katharina Pachmann