



Labor Dr. med. Ulrich Pachmann · Kurpromenade 2 · 95448 Bayreuth

Bayreuth, 09.12.2014

Dr. XXXX

Your patient: XXXX  
 Born: **09.02.1954**

Your request from: 01.12.2014  
 Our Lab number: T421398  
 initial findings: T418852, T420086,  
 T420737

**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: Melanoma. Follow up.

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	<b>5 500</b>	<b>27,5</b>		numerous

in-vitro-vitality reduction in relation to concentration and time (in%) with eutherapeutic concentrations of			
Vitamin C			The ideal is a reduction by 100% in short-term cell culture
3g	<b>10</b>		
50g	<b>35</b>		
120g	<b>25</b>		

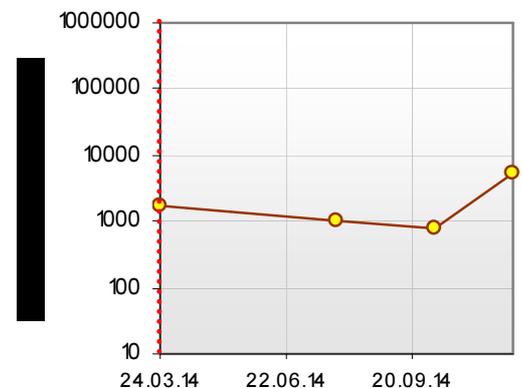
The material you sent for examination could be thoroughly evaluated. We now found a significantly increased number of vital tumor cells circulating in the blood. In comparison to the previous findings from October 2014 the number of potential tumor cells increased 7-fold. In addition, there were numerous specific **cell fragments** detected. Specific cell fragments occur, for example as part of an immune response and indicate damaged cells.

**In vitro vitality reduction** occurred marginally at **Vitamin C 50g**.

After the continuous decrease of cell numbers we now can see over a period of 2 months an increase to a high cell level.

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