

## Use of a food additive in people suffering from AIDS

### Abstract:

40 patients (women and men with an age between 19 and 48 years) suffering from full blown AIDS received daily orally a nutraceutical composed of plant extracts on nano carriers together with oligomeric uronic acids for 90 days. On days 0, 45 and 90 bodyweight, CD4+ counts, virus load, general health status and additional diseases had been recorded.

2 patients died and two dropped out (could not be examined again) for unknown reasons. On day 90 28 (74% of 38) patients could be found below the limits of full blown AIDS due to CD4+ counts and virus load. Diarrhoeas stopped in all of these cases and body weight became normal. In the remaining 10 cases in 8 people health status as well as CD4+ counts and virus load improved significantly. 6 months after the start of the trial 19 patients were able to go to work normally again.

### Material and Methods:

40 patients with all signs of full blown AIDS received daily three tablets (450 mg each) containing plant extracts on nano carriers. They received no other treatment. The used criteria for full blown AIDS were: CD4+ counts below 200/ $\mu$ l, virus load >500,000 copies/ ml (PCR) and weight loss below a body mass index of 20. All three of them had to be fulfilled. On days 0, 45, and 90 bodyweight, CD4+ counts, virus load, general health status and additional diseases were recorded.

### Results:

Patient No.	sex f= female m= male	Age years	day of trial	weight kg	CD4+ cell/ml	PCR HIV-1 copies/ml	fever >38,5°C	diarrhoea*	other ** symptoms	health*** status
1	f	21	0	48	51	>500,000	+	++	TB TH VI	+++
			45	51	124	8270			TB	+
			90	54	626	<50			TB	0
2	f	42	0	47	84	>500,000	++	+++	TB CMV	+++
			45	52	210	2397		+		++
			90	59	430	<50			TB	0
3	f	38	0	51	87	>500,000	+	++	VI TH T	+++
			45	53	187	3070		+	VI T	++
			90	53	614	<50			T	0
4	m	45	0	61	56	>500,000		++	TB TH PCP	+++
			45	64	94	5390		++	TH PCP	+
			90	63	416	<50			TB PCP(?)	0
5	m	32	0	52	78	>500,000	++	++	TH T	+++
			45	55	234	2986		+	T	+
			90	56	865	<50			T	0
6	f	39	0	47	103	>500,000	+	++	TB VI T	+++
			45	49	84	?	+	+	TB T	++
			90	49	456	<50		+	TB T	0
7	m	48	0	59	70	>500,000	+	++	TH T	+++
			45	61	122	2397		++		+
			90	63	576	<50				0
8	m	22 died d. 17	0	52	62	>500,000	+++	+++	TH T TB	+++
			45							
			90			<50				
9	m	19	0	50	84	>500,000	+++	++	TB TH T	+++
			45	52	122	4872	++	+	TB TH T	+
			90	52	185	62	++		TB T	+
10	f	31	0	49	92	>500,000	+	+	TH VI	+++
			45	?	222	4365	+	++	TH	+
			90	57	1248	<50				0
11	m	36	0	59	43	>500,000	+++	++	TH T PCP	+++

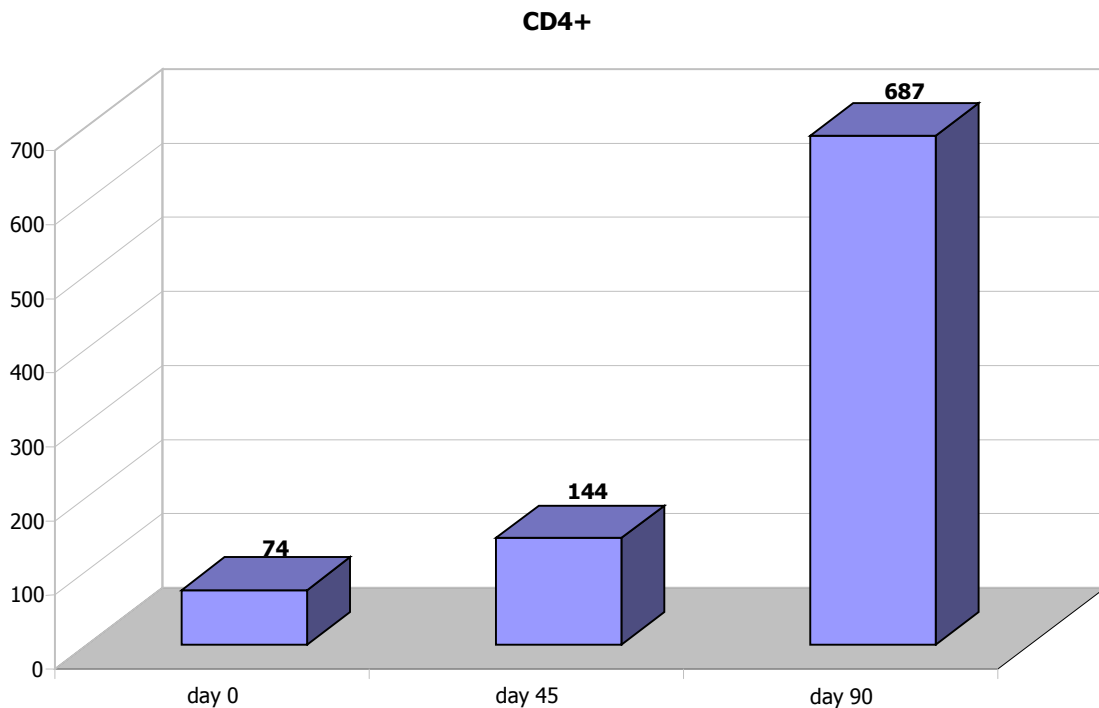
			45	60	87	7609	++		TH T PCP	++
			90	64	172	<84	++		T	+
12	m	22	0	52	77	>500,000	++	++	TB TH PCP	+++
			45	56	116	2897		+	TB TH PCP	+++
			90	57	?	<50			TB	0
13	m	34	0	59	78	>500,000	+	++	T TH	+++
			45	61	209	1295		+		+
			90	61	976	<50				0
14	m	45	0	58	64	>500,000	++	+++	TB TH CMV	+++
			45	60	154	3497			TB CMV	++
			90	62	289	<50	+	+	TB	0
15	f	19	0	44	43	>500,000	++	+++	VI T	+++
			45	50	78	2583	++		VI T	+
			90	52	485	410		+	T	+
16	m	20 drop out	0	51	100	>500,000	?	+++	TH TB	+++
			45	51	74	9736	+	+	TB	++
			90							
17	m	34	0	57	82	>500,000	++	+++	TH T	+++
			45	61	189	3465	+	+	TH T	++
			90	62	412	<50		+	T	+
18	f	46	0	51	90	>500,000	+	++	TB VI	+++
			45	51	110	2794	+	++	TB VI	++
			90	56	494	<50			TB	+
19	m	22	0	57	74	>500,000	++	+++	TH CVM	+++
			45	60	125	2175	+		CVM	++
			90	61	382	<50	+			0
20	m	23	0	54	100	>500,000	++	+++	TB TH PCP	+++
			45	55	94	4365	+	+	TB	++
			90	58	857	<50		+	TB	0
21	m	27	0	49	72	>500,000	+	+++	TH T	+++
			45	54	184	5623	+		T	+
			90	57	?	<50		+	T	0
22	f	35	0	45	113	>500,000	++	+++	TB VI	+++
			45	48	204	6583	+		TB VI	++
			90	46	172	115	++	+	TB VI	+
23	f	20	0	61	42	>500,000	++	+++	CMV T VI	+++
			45	63	88	2397	+		CMV T	++
			90	63	412	<50		+	T	0
24	m	31	0	50	64	>500,000	+++	+++	TH TB	+++
			45	52	130	4360	+	+	TH TB	++
			90	53	178	5840	+	+	TH TB	++
25	m	29	0	54	62	>500,000	++	+++	TH CVM	+++
			45	55	127	4592		+	CVM	++
			90	55	115	<50		++	TH CVM	+
26	m	40	0	59	72	>500,000	++	++	TH TB T	+++
			45	62	184	6786	++		TH TB T	++
			90	64	576	<50		+	TB T	0
27	f	21 died d. 48	0	47	42	>500,000	+++	+++	TB VI T	+++
			45	45	56	>500,000	++	+++	TB VI T	+++
			90							
28	f	34	0	48	142	>500,000	++	++	VI T	++
			45	52	104	7654	+			+
			90	52	246	1242				+
29	m	36	0	54	92	>500,000	++	+++	TB TH	+++
			45	57	112	?	+	++	TB TH	+
			90	57	384	<50	++	+	TB	0
30	m	21	0	58	54	>500,000	++	++	TH CMV	+++
			45	63	170	5987	+	+	CMV	++
			90	62	580	<50				0
31	f	20	0	52	21	>500,000	++	+++	TH VI T	+++
			45	52	84	12 349	++	+++	TH VI T	+++
			90	54	72	1836	+	+	VI T	++
32	m	37 drop out	0	64	87	>500,000	+	++	TH T	++
			45	72	214	8234			T	+
			90							
33	m	19	0	62	73	>500,000	+	++	CMV	+++
			45	60	95	11 423	+		CMV	++
			90	64	172	813	+			+
34	f	28	0	51	23	>500,000	++	+++	TB VI TH T	+++
			45	51	116	8645	+	++	TB VI T	++

35	m	35	90	56	182	127		+	TB T	+
			0	50	110	>500,000	+++	+++	TB TH PCP	+++
			45	54	214	5693	+	++	TB PCP	++
36	f	34	90	55	594	<50			TB	0
			0	45	80	>500,000	+	++	TB VI TH	+++
			45	48	165	3219	+	+++	TB	+
37	f	28	90	50	284	<50		+		0
			0	48	120	>500,000	++	+	VI TH T	+++
			45	52	287	6730		++	TH T	++
38	m	28	90	51	903	<50		+	T	0
			0	61	54	>500,000	++	+++	TH TB CMV	+++
			45	64	94	6008	+	++	TH TB CMV	+
39	f	38	90	63	274	<50		+	TB	0
			0	44	46	>500,000	++	++	TH VI T	+++
			45	47	136	2190		+	T	++
40	f	22	90	49	306	<50			T	0
			0	50	68	>500,000	+	++	TH VI TB	+++
			45	52	130	6409	+	++	TH VI TB	+
			90	52	410	<50			TB	0

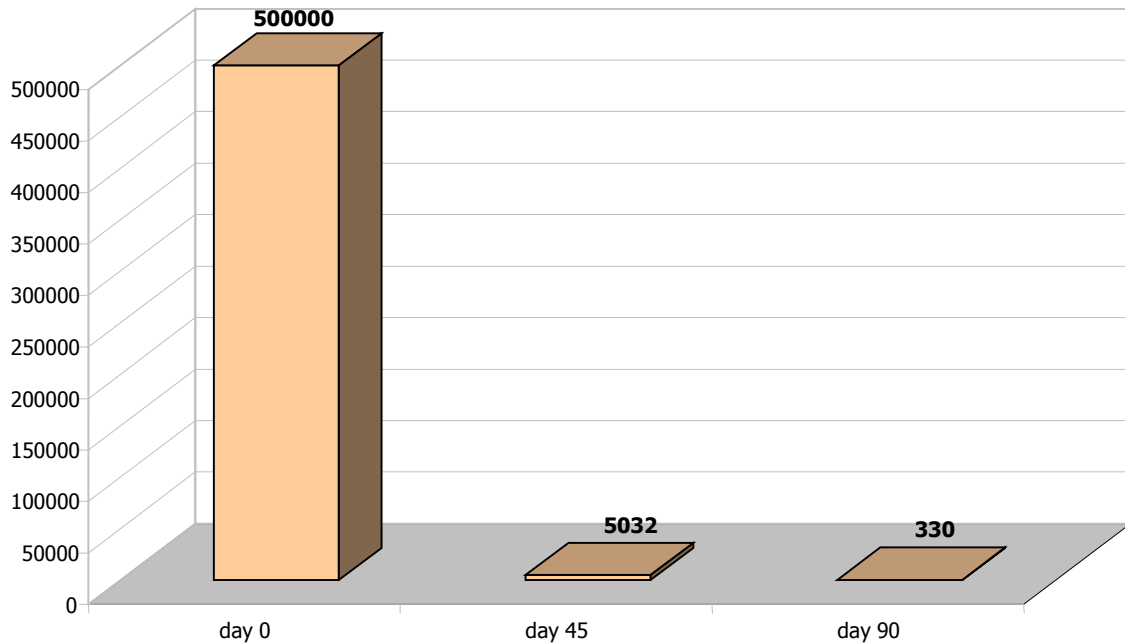
Diarrhoea: +++: very severe; ++: severe; +: light;

\*\* Other symptoms: TB: tuberculosis  
 TH: thrush  
 VI: vaginal infection  
 CMV: cytomegaly virus  
 PCP: pneumocystis carinii pneumonia  
 T: toxoplasmosis

\*\*\* Health status: +++: full blown AIDS  
 ++: HIV infection with severe symptoms  
 +: HIV infection with minor symptoms  
 0: free of symptoms



## PCR



### Discussion:

#### 1. The concept of the nutraceutical:

AIDS (acquired immunodeficiency syndrome) is not a general immune deficiency. In full blown AIDS only cellular immunity (TH1 mediated) is blocked, while humoral immunity (TH2 mediated) is not only still active but often it is even enhanced (Thomas 1984; Lucy et al. 1996; Klein et al. 1997). The shift from TH1 to TH2 can be caused for many reasons. The redox-balance of non-protein thiols seems to play a pivotal role thereby (Buhl et al. 1989; Eck 1989). By using a natural COX-2 inhibitor (Gradl 2004) it is possible to shift a TH2 reaction to a TH1 response.

The use of nano particles alone for immune-stimulation had been emphasized by Pavelic et al. 2000 and their use in cases of immunodeficiency by Ivkovič et al. 2004 and Pavelič et al. 2003. It is unclear whether there is an anti-oxidative effect or a stimulation of macrophages in the lamina propria of the gut or a combination of both effects.

Oligouronic acids in combination with bivalent cations are able to fix to immune competent cells (Gradl et al. 2000; Maurer et al. 2002) and stimulate their activity by a better oxygen supply.

Using a combination of the said substances turned out to be highly effective in piglets suffering from a TH1-immuno deficiency (post weaning multi systemic wasting syndrome).

#### 2. Relation of the concept to other AIDS treatments

At present most attempts of AIDS-therapy are concentrated on fighting of the HIV-virus. This however is a rather distorted view on infectious diseases. Each infectious disease means a guest-host relation, where the guest (pathogen) in most cases does not play an important role. Leprosy (once distributed world wide and also in Europe) is caused by mycobacterium leprae. It is so less contagious however that a normally nourished person using normal hygienic means can work on a leprosy station without any fear of infection. Even for the virus which caused one of the biggest pandemic in the passed century- the Spanish flue 1918-it can be assumed that (beside of 27 million victims worldwide) the highly contagious and virulent virus had reached about 70-80% of the people in densely populated Middle-Europe. "Only" 20% of them became sick and "only" 5 % died. Even in the latter case the constitution of the afflicted person (based on immune response) is much more important for therapy and prophylaxis than the pathogen. This is even truer for the medium contagious HIV-virus.

### 3. Conclusion

The use of a specific nutraceutical turned out to be highly effective in cases of full blown AIDS. In only 90 days 74% of 38 patients could be found below the limits of full blown AIDS due to CD4+counts and virus load. Diarrhoeas stopped in all of these cases and body weight became normal. In the remaining 10 cases in 8 people health status as well as CD4-counts and virus load improved significantly. 6 months after the start of the trial 19 patients were able to go normally to work again.

### Literature:

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