

Study

Human Tolerance of Low Molecular Weight

Polyethylene Markers

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1. Composition of the marker

The marker is administered as a soft gel with 50 mg each of two monodisperse low molecular weight polyethylene glycols of 8 (mw = 258) and 10 (mw = 318) repeating units, 0,03 g dye brilliant blue and Capmul MCM and Polysorbate 80 as an excipient for a total quantity of 300 mg/soft gel.

The soft gel capsule is composed of gelatin.

The marker is swallowed under supervision.

2. Participants of the study

The study took place between April 4th 2014 and May 16th 2014 with 12 participants initially. Two participants had to be expelled from the study because they had acquired a severe virus infection while the study was on going. This infection was not related to the intake of marker soft gels. Every participant was asked to give the following information. Data is summarized in Table 1.

- Date of birth
- Name
- Surname
- Gender
- Height
- Weight
- Smoker (yes / no, if yes how many cigarettes)
- Alcohol consumption
- Known allergies
- Blood pressure (measured on day 1 and end of the study)
- Pregnancy (yes / no)
- Number and age of children
- Acute diseases present and in the past
- Chronic diseases present and in the past
- Medication
- Known reaction to drugs
- Known reaction to polyethylene glycols

Table 1: Participant Information

	Participant 1	Participant 2	Participant 3	Participant 4	Participant 5
Date of Birth	24.02.70	03.05.58	31.10.64	13.11.50	27.10.67
Blood pressure	120 / 85	120/85	130 / 85	120 / 85	140/95
Gender	Male	Female	Male	Male	Female
Pregnancy	No	No	No	No	No
Height	185 cm	180 cm	187 cm	198 cm	167 cm
Weight	102 kg	68 kg	90 kg	108 kg	97 kg
Smoker	10 cigarettes/ day	15 cigarettes/ day	No	No	30 cigarettes/ day
Alcohol consumption	Rare	Rare	Rare	Rare	No
Allergy	No	No	No	No	No
Children	None	1980	1996	1982	1992
				1986	1995
				1995	1999
Acute diseases/ Surgery	Appendectomy, 2010	No	Surgical removal of gall stones, 2002	Lung emboli, 2014	No
Chronic diseases	No	No	High blood pressure	High blood pressure	No
Medication	No	No	Amipril, 5 mg	Micardis, 80 mg	No
Known reaction to drugs	No	No	Macrolide antibiotics	No	No
Known reaction to Polyethylene glycol	No	No	No	No	No

	Participant 6	Participant 7	Participant 8	Participant 9	Participant 10
Date of Birth	02.08.75	17.03.65	02.08.50	14.05.58	22.01.82
Blood pressure	100/70	160/100	120 / 85	120/80	120/85
Gender	Female	Female	Female	Male	Female
Pregnancy	No	No	No	No	No
Height	168 cm	170 cm	168 cm	172 cm	168 cm
Weight	72 kg	70 kg	80,5 kg	72 kg	72 kg
Smoker	20 cigarettes / day	5 cigarettes / day	No	No	No
Alcohol consumption	No	No	Rare	No	Rare
Allergy	Latex	Fruit, Hay fever	No	No	Penicillin, Nickel
Children	2007	1998	1987	No	2011
	2005	2004			
Acute diseases/ Surgery	C-Section, 2005	Streptococcus myocarditis, 1994	Knee TEP, 2013	No	No
	C-Section, 2007		C-Section, 1987		
Chronic diseases	No	High blood pressure	No	No	No
Medication	No	Micardis, 80 mg Amiodipin, 5mg	Cymbalta, Iron, Vitamin D	No	No
Known reaction to drugs	No	No	No	No	No
Known reaction to Polyethylene glycol	No	No	No	No	No

3. Operational and Organizational structure

Participants were given 1 soft gel each on the following dates (7 soft gels in total):

1. 4th of April 2014
2. 11th of April 2014
3. 18th of April 2014
4. 25th of April 2014
5. 2nd of May 2014
6. 9th of May 2014
7. 16th of May 2014

Participants were not asked to be sober when blood was collected. Blood samples were drawn after administering the soft gels on the same day on the following dates (4 blood collections in total):

1. 4th of April 2014
2. 18th of April 2014
3. 2nd of May 2014
4. 16th of May 2014

Blood samples were investigated for the following analytes:

- Heparin plasma
 - Sodium (=Na)
 - Potassium (=K)
 - Glucose (=GLU)
 - Urea (UREA)
 - Creatinine (=CREA)
 - Total protein (=TP)
 - Bilirubin (=BIL)
 - LDH (LDH)
 - AST (AST)
 - ALT (AST)
 - γ -GT (=GGT)
 - Alkaline phosphatase (=AP)
 - HDL (HDL)
 - Triglycerides (=TRI)
 - Cholesterol (=CHOL)
 - C-reactive protein (=CRP)
- EDTA blood:
 - Full blood count incl. differentiation of leucocytes

4. Results

4.1. Clinical signs of side reactions to marker soft gels

There was no side reaction like nausea, allergic reactions, increase of blood pressure etc. observed in the course of the study.

4.2. Laboratory investigations

There was no significant change of laboratory parameters observed in this study that could be directed to a side reaction to the marker soft gel.

Data are summarized in table 2 – table 11.

Table 2: Laboratory data of participant 1

			Blood test 1	Blood test 2	Blood test 3	Blood test 4
WBC	3.5 - 9.8	/ nl	7.9	8.9	9.3	9.2
Ery	3.7 - 4.8	/ pl	5.1	5.1	5.1	5.1
Hemoglobin	11.3 - 14.5	g / dl	15.7	15.4	15.2	15.1
Hematocrit	34 - 44	%	45.1	45.2	44.3	46.1
MCV	83.2 - 99.8	fl	88.0	88.0	88.0	91.0
MCH	27.3 - 33	pg	30.6	30.0	30.0	29.8
MCHC	31.8 - 34.9	g / dl	34.8	34.1	34.3	32.7
Platelets	140 - 360	/ nl	303.0	314.0	337.0	340.0
Differential						
Basophilic	<1.5	%	0.6	0.7	1.1	0.9
Eosinophilic	0.4 - 6.6	%	2.2	4.3	5.8	5.3
Neutrophilic	43 - 74.8	%	65.6	61.9	58.8	61.1
Lympho	16.4 - 45	%	24.6	24.9	25.6	24.1
Mono	2.6 - 8.2	%	5.5	6.0	6.5	7.1
Large unstained cells	<4.5	%	1.5	2.2	2.1	1.5
AP	55 - 105	U / l	96	94	93	86
BIL	0.1 - 1.2	mg / dl	0.59	0.54	0.45	0.47
CHOL	<190	mg / dl	263	212	229	237
CRP	<3.0	mg / l	3.6	5.9	6.6	6.1
TP	6.6 - 8.3	g / dl	7.6	7.7	7.7	7.1
GGT	<40	U / l	74	60	65	59
GLU	60 - 99	mg / dl	87	99	104	100
AST	<35	U / l	23	24	23	33
ALT	<35	U / l	42	35	42	42
HDL	>40	mg / dl	54.7	48.3	58.4	55.3
UREA	15 - 40	mg / dl	29.7	28	28.6	40.7
K	3.6 - 4.8	mg / dl	3.77	3.73	4.23	4.59
CREA	0.81 - 0.95	mg / dl	0.75	0.82	0.74	0.76
LDH	<250	U / l	174	188	188	172
NA	135 - 145	mg / dl	138	143	138	140
TRI	<150	mg / dl	123	103	85	106

Table 3: Laboratory data of participant 2

			Blood test 1	Blood test 2	Blood test 3	Blood test 4
WBC	3.5 - 9.8	/ nl	9.2	11.9	11.2	10.7
Ery	3.7 - 4.8	/ pl	4.6	4.7	4.3	4.6
Hemoglobin	11.3 - 14.5	g / dl	13.7	13.3	12.7	13.3
Hematocrit	34 - 44	%	41.2	40.0	38.1	41.2
MCV	83.2 - 99.8	fl	89.0	86.0	89.0	89.0
MCH	27.3 - 33	Pg	29.7	28.6	29.7	28.7
MCHC	31.8 - 34.9	g / dl	33.3	33.3	33.3	32.2
Platelets	140 - 360	/ nl	253.0	274.0	251.0	241.0
Differential						
Basophilic	<1.5	%	0.6	0.6	0.6	0.7
Eosinophilic	0.4 - 6.6	%	1.7	1.3	1.2	2.0
Neutrophilic	43 - 74.8	%	57.3	57.9	58.6	55.3
Lympho	16.4 - 45	%	31.9	31.8	31.6	34.2
Mono	2.6 - 8.2	%	6.9	7.0	6.2	6.0
Large unstained cells	<4.5	%	1.6	1.4	1.9	1.7
AP	55 - 105	U / l	96	87	91	93
BIL	0.1 - 1.2	mg / dl	0.62	0.43	0.45	0.74
CHOL	<190	mg / dl	276	284	260	269
CRP	<3.0	mg / l	<3.0	<3.0	<3.0	<3.0
TP	6.6 - 8.3	g / dl	7.3	7.6	7	7.6
GGT	<40	U / l	21	20	20	21
GLU	60 - 99	mg / dl	61	84	84	63
AST	<35	U / l	22	23	20	24
ALT	<35	U / l	14	16	12	16
HDL	>40	mg / dl	67.4	64	66.5	65.9
UREA	15 - 40	mg / dl	30.5	45.8	46.8	36.2
K	3.6 - 4.8	mg / dl	4.02	4.53	4.82	4.82
CREA	0.81 - 0.95	mg / dl	0.76	0.7	0.78	0.77
LDH	<250	U / l	165	175	171	169
NA	135 - 145	mg / dl	142	139	141	141
TRI	<150	mg / dl	146	309	192	158

Table 4: Laboratory data of participant 3

			Blood test	Blood test	Blood test	Blood test
			1	2	3	4
WBC	3.5 - 9.8	/ nl	6.3	6.0	7.8	7.0
Ery	3.7 - 4.8	/ pl	4.1	4.0	4.1	4.3
Hemoglobin	11.3 - 14.5	g / dl	13.3	13.3	13.2	13.8
Hematocrit	34 - 44	%	40.1	37.8	38.6	40.7
MCV	83.2 - 99.8	fl	98.0	94.0	94.0	95.0
MCH	27.3 - 33	pg	32.4	33.1	32.0	32.2
MCHC	31.8 - 34.9	g / dl	33.2	35.2	34.3	33.9
Platelets	140 - 360	/ nl	196.0	187.0	201.0	180.0
Differential						
Basophilic	<1.5	%	0.7	0.9	0.9	0.8
Eosinophilic	0.4 - 6.6	%	2.9	3.6	2.9	1.2
Neutrophilic	43 - 74.8	%	64.2	62.2	63.1	73.4
Lympho	16.4 - 45	%	27.6	28.4	28.6	20.5
Mono	2.6 - 8.2	%	3.3	3.9	3.5	3.2
Large unstained cells	<4.5	%	1.3	0.9	1.0	0.9
AP	55 - 105	U / l	39	42	38	37
BIL	0.1 - 1.2	mg / dl	0.99	1.49	1.57	1.56
CHOL	<190	mg / dl	177	179	176	180
CRP	<3.0	mg / l	<3.0	<3.0	<3.0	<3.0
TP	6.6 - 8.3	g / dl	7.1	7.2	7.1	6.9
GGT	<40	U / l	10	11	10	10
GLU	60 - 99	mg / dl	82	92	93	91
AST	<35	U / l	25	26	23	27
ALT	<35	U / l	16	16	16	18
HDL	>40	mg / dl	64.2	63.6	66.7	66
UREA	15 - 40	mg / dl	28.6	30.4	24.3	25.1
K	3.6 - 4.8	mg / dl	4.53	4.16	4.05	4.05
CREA	0.81 - 0.95	mg / dl	0.7	0.86	0.73	0.74
LDH	<250	U / l	155	179	149	166
NA	135 - 145	mg / dl	137	138	139	140
TRI	<150	mg / dl	65	64	68	68

Table 5: Laboratory data of participant 4

			Blood test 1	Blood test 2	Blood test 3	Blood test 4
WBC	3.5 - 9.8	/ nl	7.5	7.9	7.6	6.9
Ery	3.7 - 4.8	/ pl	4.6	4.6	4.9	4.8
Hemoglobin	11.3 - 14.5	g / dl	14.1	13.8	14.6	14.2
Hematocrit	34 - 44	%	40.7	39.9	43.8	40.1
MCV	83.2 - 99.8	fl	88.0	87.0	90.0	84.0
MCH	27.3 - 33	pg	30.5	30.2	29.9	29.6
MCHC	31.8 - 34.9	g / dl	34.6	34.6	33.3	35.4
Platelets	140 - 360	/ nl	322.0	361.0	348.0	341.0
Differential						
Basophilic	<1.5	%	1.0	0.7	1.1	0.7
Eosinophilic	0.4 - 6.6	%	3.2	3.1	2.6	3.4
Neutrophilic	43 - 74.8	%	58.1	57.4	56.9	58.3
Lympho	16.4 - 45	%	30.1	31.6	30.4	27.7
Mono	2.6 - 8.2	%	6.1	5.7	7.0	7.7
Large unstained cells	<4.5	%	1.4	1.4	2.0	2.2
AP	55 - 105	U / l	47	50	50	47
BIL	0.1 - 1.2	mg / dl		0.76	0.84	0.77
CHOL	<190	mg / dl	237	264	279	264
CRP	<3.0	mg / l	5.9	9.2	5.8	8.7
TP	6.6 - 8.3	g / dl	7.3	7.5	8	7.2
GGT	<40	U / l	39	39	44	40
GLU	60 - 99	mg / dl	86	83	91	89
AST	<35	U / l	19	20	27	23
ALT	<35	U / l	20	19	16	19
HDL	>40	mg / dl	41.2	44.6	49.9	44.8
UREA	15 - 40	mg / dl	75.4	77.5	85.3	74
K	3.6 - 4.8	mg / dl	4.68	4.53	5.07	4.35
CREA	0.81 - 0.95	mg / dl	1.38	1.11	1.34	1.19
LDH	<250	U / l	236	237	237	235
NA	135 - 145	mg / dl	138	138	141	142
TRI	<150	mg / dl	211	395	233	280

Table 6: Laboratory data of participant 5

			Blood test 1	Blood test 2	Blood test 3	Blood test 4
WBC	3.5 - 9.8	/ nl	9.9	8.6	10.3	10.6
Ery	3.7 - 4.8	/ pl	4.8	4.8	4.9	5.1
Hemoglobin	11.3 - 14.5	g / dl	14.8	14.7	15.0	15.3
Hematocrit	34 - 44	%	44.5	43.7	44.0	46.2
MCV	83.2 - 99.8	fl	92.0	91.0	90.0	90.0
MCH	27.3 - 33	pg	30.5	30.6	30.6	29.8
MCHC	31.8 - 34.9	g / dl	33.2	32.6	33.9	33.1
Platelets	140 - 360	/ nl	314.0	307.0	335.0	342.0
Differential						
Basophilic	<1.5	%	0.5	0.6	0.5	0.9
Eosinophilic	0.4 - 6.6	%	2.3	2.2	2.1	2.4
Neutrophilic	43 - 74.8	%	48.2	46.8	48.9	46.3
Lympho	16.4 - 45	%	43.3	45.1	43.9	44.4
Mono	2.6 - 8.2	%	4.6	4.0	3.2	4.8
Large unstained cells	<4.5	%	1.2	1.2	1.3	1.1
AP	55 - 105	U / l	49		54	56
BIL	0.1 - 1.2	mg / dl	0.49	0.47	0.43	0.72
CHOL	<190	mg / dl	243	239	249	252
CRP	<3.0	mg / l	<3.0	<3.0	<3.0	<3.0
TP	6.6 - 8.3	g / dl	7.1	7.1	7	7.3
GGT	<40	U / l	30	28	32	32
GLU	60 - 99	mg / dl	73	82	77	81
AST	<35	U / l	22	25	21	32
ALT	<35	U / l	26	30	27	35
HDL	>40	mg / dl	45.6	48.4	47.5	56.1
UREA	15 - 40	mg / dl	32.2	28.7	25.6	25.7
K	3.6 - 4.8	mg / dl	3.9	4.27	4.78	4.22
CREA	0.81 - 0.95	mg / dl	0.74	0.73	0.76	0.73
LDH	<250	U / l	174	180	160	206
NA	135 - 145	mg / dl	139	140	143	139
TRI	<150	mg / dl	181	204	207	210

Table 7: Laboratory data of participant 6

			Blood test 1	Blood test 2	Blood test 3	Blood test 4
WBC	3.5 - 9.8	/ nl	8.9	6.7	7.5	6.6
Ery	3.7 - 4.8	/ pl	4.4	4.2	4.5	4.1
Hemoglobin	11.3 - 14.5	g / dl	13.5	12.6	13.4	12.8
Hematocrit	34 - 44	%	40.6	37.2	40.7	37.3
MCV	83.2 - 99.8	fl	92	90.0	91.0	92.0
MCH	27.3 - 33	pg	30.5	30.3	29.8	31.4
MCHC	31.8 - 34.9	g / dl	33.2	33.8	32.9	34.3
Platelets	140 - 360	/ nl	220	265.0	282.0	216.0
Differential						
Basophilic	<1.5	%	0.9	0.9	0.7	0.8
Eosinophilic	0.4 - 6.6	%	1.3	1.9	1.8	2.1
Neutrophilic	43 - 74.8	%	61.6	51.7	51.2	52.7
Lympho	16.4 - 45	%	28.6	39.4	38.9	37.2
Mono	2.6 - 8.2	%	5.4	5.0	5.4	5.5
Large unstained cells	<4.5	%	2	1.1	2.0	1.7
AP	55 - 105	U / l	59	52	57	55
BIL	0.1 - 1.2	mg / dl	0.52	0.34	0.35	0.58
CHOL	<190	mg / dl	173	178	182	163
CRP	<3.0	mg / l	<3.0	<3.0	<3.0	<3.0
TP	6.6 - 8.3	g / dl	7.8	7.5	7.5	7.3
GGT	<40	U / l	23	24	24	23
GLU	60 - 99	mg / dl	94	82	79	78
AST	<35	U / l	23	22	22	21
ALT	<35	U / l	19	16	19	18
HDL	>40	mg / dl	65.5	65.2	64.8	65.7
UREA	15 - 40	mg / dl	32.6	28.2	28.2	27.4
K	3.6 - 4.8	mg / dl	4.56	4.14	4.46	3.92
CREA	0.81 - 0.95	mg / dl	0.68	0.72	0.7	0.69
LDH	<250	U / l	184	181	183	186
NA	135 - 145	mg / dl	90	138	139	138
TRI	<150	mg / dl		167	219	79

Table 8: Laboratory data of participant 7

			Blood test 1	Blood test 2	Blood test 3	Blood test 4
WBC	3.5 - 9.8	/ nl	6.2	5.2	5.3	6.3
Ery	3.7 - 4.8	/ pl	4.8	4.8	4.9	5.0
Hemoglobin	11.3 - 14.5	g / dl	14.2	14.2	14.0	14.3
Hematocrit	34 - 44	%	40.4	40.7	41.7	43.7
MCV	83.2 - 99.8	fl	84.0	86.0	86.0	87.0
MCH	27.3 - 33	pg	29.7	29.9	28.7	28.4
MCHC	31.8 - 34.9	g / dl	35.2	34.9	33.5	32.7
Platelets	140 - 360	/ nl	255.0	256.0	257.0	275.0
Differential						
Basophilic	<1.5	%	0.4	0.8	0.7	0.8
Eosinophilic	0.4 - 6.6	%	3.7	5.6	4.4	2.7
Neutrophilic	43 - 74.8	%	54.3	48.6	53.5	57.9
Lympho	16.4 - 45	%	35.4	37.4	35.0	32.6
Mono	2.6 - 8.2	%	4.2	4.3	4.3	4.0
Large unstained cells	<4.5	%	2.0	3.3	2.0	1.9
AP	55 - 105	U / l	82		84	85
BIL	0.1 - 1.2	mg / dl	0.35	0.35	0.29	0.36
CHOL	<190	mg / dl	273	272	274	289
CRP	<3.0	mg / l	<3.0	<3.0	<3.0	<3.0
TP	6.6 - 8.3	g / dl	7.4	7.4	7.5	7.7
GGT	<40	U / l	14	14	16	15
GLU	60 - 99	mg / dl	82	95	91	89
AST	<35	U / l	20	21	19	22
ALT	<35	U / l	18	18	15	19
HDL	>40	mg / dl	55.9	60.1	58.6	56.8
UREA	15 - 40	mg / dl	32.3	38.6	35.2	34.5
K	3.6 - 4.8	mg / dl	3.66	4.16	3.71	3.86
CREA	0.81 - 0.95	mg / dl	0.7	0.72	0.65	0.67
LDH	<250	U / l	194	208	183	197
NA	135 - 145	mg / dl	136	137	139	135
TRI	<150	mg / dl	179	93	130	125

Table 9: Laboratory data of participant 8

			Blood test 1	Blood test 2	Blood test 3	Blood test 4
WBC	3.5 - 9.8	/ nl	3.9	4.9	4.1	3.6
Ery	3.7 - 4.8	/ pl	3.7	3.7	3.5	3.8
Hemoglobin	11.3 - 14.5	g / dl	11.9	12.1	11.8	12.4
Hematocrit	34 - 44	%	35.0	37.6	34.7	37.3
MCV	83.2 - 99.8	fl	95.0	101.0	98.0	99.0
MCH	27.3 - 33	Pg	32.4	32.6	33.4	33.0
MCHC	31.8 - 34.9	g / dl	34.0	32.2	34.0	33.5
Platelets	140 - 360	/ nl	222.0	240.0	229.0	209.0
Differential						
Basophilic	<1.5	%	0.3	0.4	0.1	0.5
Eosinophilic	0.4 - 6.6	%	2.3	1.8	2.4	1.7
Neutrophilic	43 - 74.8	%	52.5	51.0	49.3	48.9
Lympho	16.4 - 45	%	37.0	39.3	40.1	42.4
Mono	2.6 - 8.2	%	6.0	5.6	5.5	5.0
Large unstained cells	<4.5	%	2.0	1.9	2.5	1.6
AP	55 - 105	U / l	85	79	83	78
BIL	0.1 - 1.2	mg / dl	0.57	0.35	0.56	0.5
CHOL	<190	mg / dl	247	275	278	260
CRP	<3.0	mg / l	<3.0	<3.0	<3.0	<3.0
TP	6.6 - 8.3	g / dl	7.4	7.3	7.2	7.4
GGT	<40	U / l	26	31	27	23
GLU	60 - 99	mg / dl	92	93	95	99
AST	<35	U / l	24	26	23	24
ALT	<35	U / l	18	25	24	19
HDL	>40	mg / dl	92.4	91.8	89.4	89.4
UREA	15 - 40	mg / dl	36.1	35	45.2	36
K	3.6 - 4.8	mg / dl	4.41	4.69	4.44	4.52
CREA	0.81 - 0.95	mg / dl	0.72	0.82	0.69	0.73
LDH	<250	U / l	217	237	205	209
NA	135 - 145	mg / dl	140	139	138	139
TRI	<150	mg / dl	77	162	108	119

Table 10: Laboratory data of participant 9

			Blood test 1	Blood test 2	Blood test 3	Blood test 4
WBC	3.5 - 9.8	/ nl	5.2	5.9	5.7	4.7
Ery	3.7 - 4.8	/ pl	4.9	5.0	5.3	4.8
Hemoglobin	11.3 - 14.5	g / dl	15.4	16.5	16.2	15.6
Hematocrit	34 - 44	%	44.1	47.3	48.3	45.1
MCV	83.2 - 99.8	fl	90.0	94.0	91.0	93.0
MCH	27.3 - 33	pg	31.6	32.8	30.6	32.2
MCHC	31.8 - 34.9	g / dl	34.9	34.9	33.5	34.6
Platelets	140 - 360	/ nl	199.0	157.0	192.0	169.0
Differential						
Basophilic	<1.5	%	0.4	1.2	1.2	0.9
Eosinophilic	0.4 - 6.6	%	0.6	1.1	0.6	0.9
Neutrophilic	43 - 74.8	%	65.5	62.2	57.9	58.0
Lympho	16.4 - 45	%	27.8	27.8	32.5	32.3
Mono	2.6 - 8.2	%	4.3	5.7	5.5	5.9
Large unstained cells	<4.5	%	1.5	2.0	2.3	2.0
AP	55 - 105	U / l				
BIL	0.1 - 1.2	mg / dl	0.98	0.99	0.84	0.95
CHOL	<190	mg / dl	217	249	246	219
CRP	<3.0	mg / l	<0.3	<3.0	<3.0	<3.0
TP	6.6 - 8.3	g / dl	6.9	6.8	6.8	6.9
GGT	<40	U / l	40	50	51	51
GLU	60 - 99	mg / dl	97	87	81	86
AST	<35	U / l	27	24	28	24
ALT	<35	U / l	37	36	39	29
HDL	>40	mg / dl	63	63.8	64.9	64.4
UREA	15 - 40	mg / dl		42.5	42.7	42.9
K	3.6 - 4.8	mg / dl	4.26	4.07	4.75	4.33
CREA	0.81 - 0.95	mg / dl	1.15	1.24	1.12	1.14
LDH	<250	U / l	183	164	174	157
NA	135 - 145	mg / dl	140	137	137	138
TRI	<150	mg / dl	123	104	89	77

Table 11: Laboratory data of participant 10

			Blood test 1	Blood test 2	Blood test 3	Blood test 4
WBC	3.5 - 9.8	/ nl	8.0	6.8	8.0	6.0
Ery	3.7 - 4.8	/ pl	4.5	4.6	4.5	4.6
Hemoglobin	11.3 - 14.5	g / dl	13.9	13.9	13.5	14.0
Hematocrit	34 - 44	%	40.3	42.1	41.3	42.3
MCV	83.2 - 99.8	fl	90.0	92.0	91.0	92.0
MCH	27.3 - 33	pg	31.1	30.2	29.7	30.6
MCHC	31.8 - 34.9	g / dl	34.5	33.0	32.7	33.1
Platelets	140 - 360	/ nl	301.0	345.0	326.0	295.0
Differential						
Basophilic	<1.5	%	0.2	0.9	0.4	1.3
Eosinophilic	0.4 - 6.6	%	3.2	5.0	4.0	3.7
Neutrophilic	43 - 74.8	%	60.1	53.1	57.0	53.9
Lympho	16.4 - 45	%	31.1	33.8	32.0	32.8
Mono	2.6 - 8.2	%	3.7	5.8	5.0	6.4
Large unstained cells	<4.5	%	1.7	1.4	1.5	1.9
AP	55 - 105	U / l	83	81	85	76
BIL	0.1 - 1.2	mg / dl	0.51	0.61	0.48	0.47
CHOL	<190	mg / dl	223	221	214	203
CRP	<3.0	mg / l	<3.0	<3.0	<3.0	<3.0
TP	6.6 - 8.3	g / dl	8.1	7.7	8	8.1
GGT	<40	U / l	12	12	10	12
GLU	60 - 99	mg / dl	88	93	84	69
AST	<35	U / l	17	18	18	17
ALT	<35	U / l	17	17	17	16
HDL	>40	mg / dl	62	59.8	60.3	63.8
UREA	15 - 40	mg / dl	32.2	29.8	30.5	37.8
K	3.6 - 4.8	mg / dl	3.68	4.01	3.65	3.97
CREA	0.81 - 0.95	mg / dl	0.67	0.72	0.68	0.78
LDH	<250	U / l	182	177	200	179
NA	135 - 145	mg / dl	140	140	140	141
TRI	<150	mg / dl	55	52	79	50