

## DEKS

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Analysis period:  
01.11.2022 – 02.11.2022

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This report contains:  
• This letter  
• Summary report  
• Individual results

Approved by AKJ  
xx.xx.2022

Next round  
12.12.2022

# 4248 DK Cells in body fluid EQA report 04/2022

## Shipment

The materials were sent refrigerated to prolong the life of the cells. The materials were sent from DEKS on 31.10.2022

## Number of participants

40 participants reported results from 4 different instrument types with a total of 61 instruments.

A single participant has used microscopy to count erythrocytes. Most participants analysed the materials on 01/11, the remaining participants analysed the materials on 02/11, which was also the last analysis day.

## Sample material

The materials were Cellpack DCL to which cells from the buffy coat layer and erythrocytes from EDTA blood samples were added.

## Statistics

Mean, SD and CV% are calculated for all results as well as for the principle groups.

The acceptance interval is calculated from the overall mean value (M), which assumes that the results are normally distributed. For each quantity, it is examined whether the results deviate to an unacceptable degree from the normal distribution, by looking at the difference between the overall mean and the median in relation to the width of the acceptance interval.

## Method principles

Sysmex: The method principle for erythrocytes is impedance and for leukocytes and nucleated cells it is light scattering and fluorescence.

GloCyte: The method principle is fluorescence for both erythrocytes and leukocytes.

## Target values

The recommended target values (M) shown in the histograms are the mean value of all results.

## Outliers

Outliers are defined as a result, which is more than 3.2 SD from the target value.

The number of outliers is indicated in the last column of the *Summary*.



## Acceptance interval

Csf—Erythrocytes; num.c.	$\pm 20 \%$
Other components	$\pm 40 \%$

## Results and comments

Most of the participants' results originate from Sysmex XN, therefore the overall mean value is influenced by this.

### **Csf—Erythrocytes; num.c**

### **Csf—Nucleated cells; num.c**

### **Csf—Leukocytes; num.c**

There is fine agreement between the participants in both levels.

### **Csf—Leukocytes(mononucl.); num.c.**

### **Csf—Leukocytes(mononucl.); num.fr.**

### **Csf—Leukocytes(polynucl.); num.c.**

### **Csf—Leukocytes(polynucl.); num.fr.**

There are acceptable CV% for these 4 components.

You are welcome to contact us if you have comments or questions about the above.

Yours sincerely

**Karin Heidemann and Morten Pedersen**

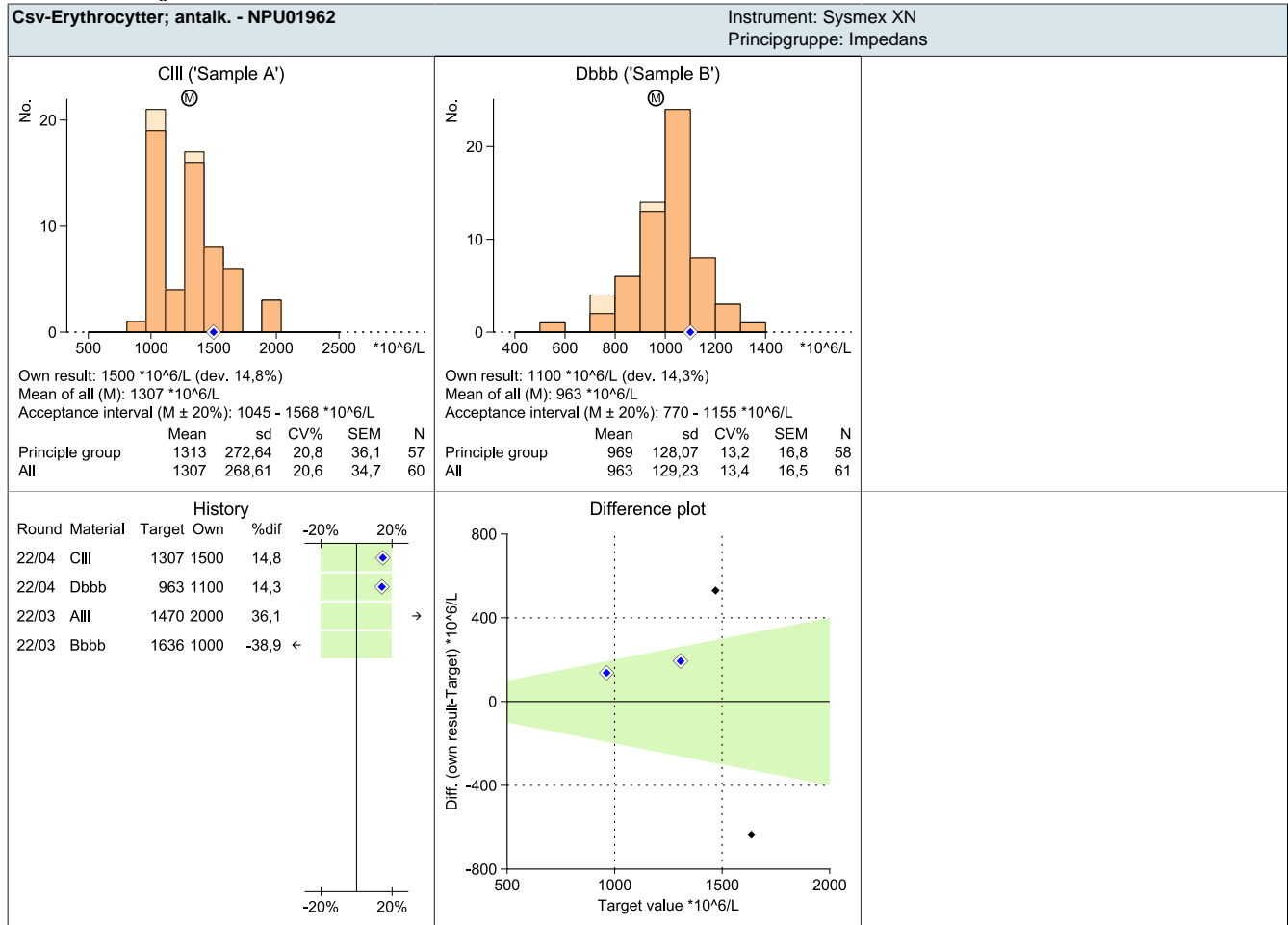


## Components, Danish names vs. English and Swedish names in the histograms

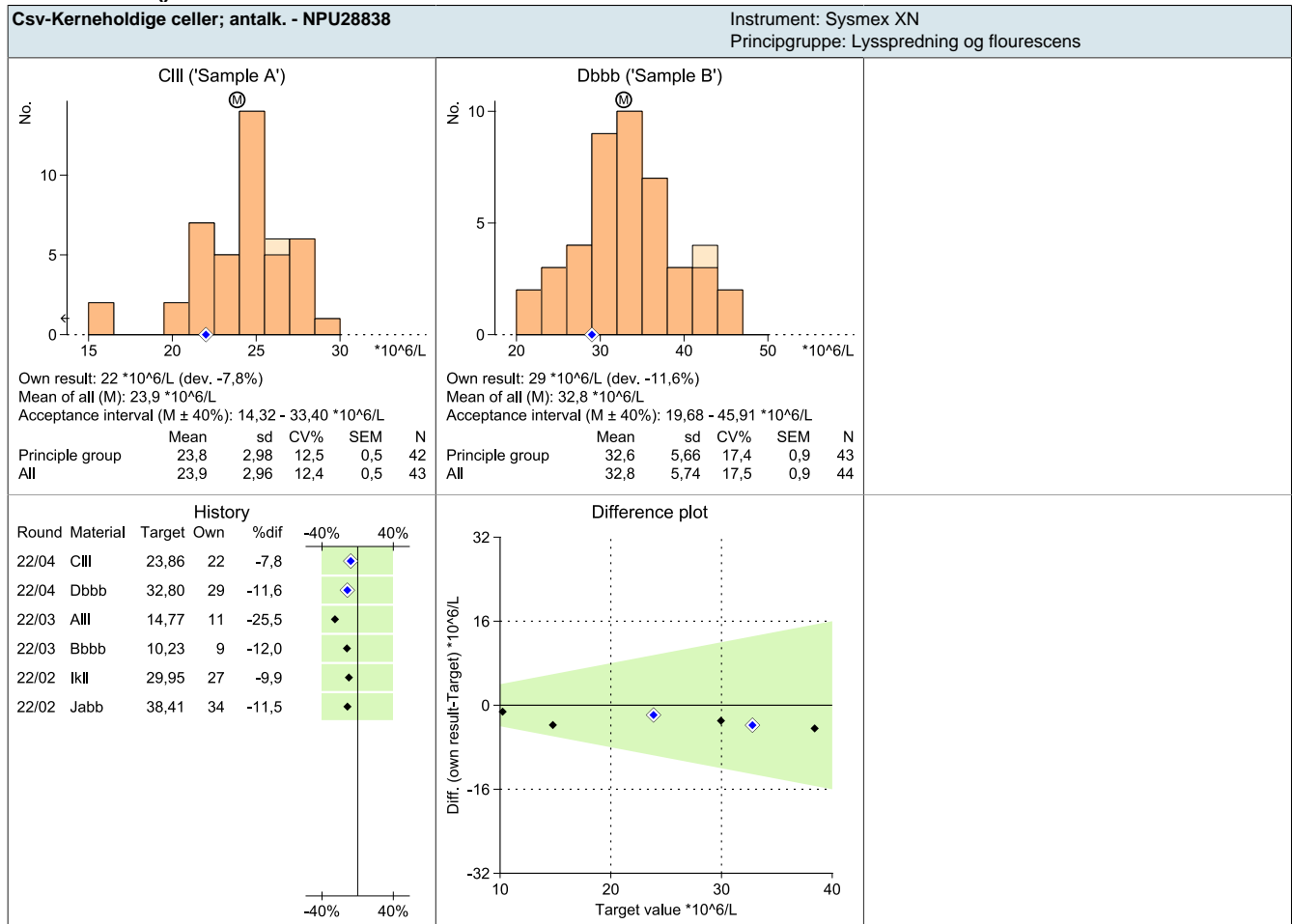
Danish name	English name	Swedish name	Unit
Csv-Erythrocytter; antalk.	Csf-Erythrocytes; num.c.	Csv—Erythrocyter;ant konc	10 <sup>6</sup> /L
Csv-Kerneholdige celler; antalk.	Csf-Nucleated cells; num.c.	Csv—Kärnförande celler;ant konc	10 <sup>6</sup> /L
Csv-Leukocyttter; antalk.	Csf-Leukocytes; num.c.	Csv—Leukocyter;ant konc	10 <sup>6</sup> /L
Csv-Leukocyttter (mononukl.); antalk.	Csf-Leukocytes(mononucl.); num.c.	Csv—Leukocyter(mono);ant konc	10 <sup>6</sup> /L
Csv-Leukocyttter (polynukl.); antalk.	Csf-Leukocytes(polynucl.); num.c.	Csv—Leukocyter(poly);ant konc	10 <sup>6</sup> /L
Lkcs(Csv)-Leukocyttter (mononukl.); antalfr.	Lkcs(Csf)-Leukocytes(mononucl.); num.fr.	Lkc(Csv)—Leukocyter(mono);ant fr	%
Lkcs(Csv)-Leukocyttter (polynukl.);antalfr.	Lkcs(Csf)—Leukocytes(polynucl.); num.fr.	Lkc(Csv)—Leukocyter(poly);ant fr	%

Component	Mean	Sd	CV	sem	N	Outliers
<b>Csv-Erythrocytter; antalk. Sample 'CIII'</b>						
Alle	1307	269	20,6	34,7	60	0
GloCyte	1093				1	0
Mikroskopi	1234	188,8	15,31	133,5	2	0
Sysmex XN	1313	273	20,8	36,1	57	0
<b>Csv-Erythrocytter; antalk. Sample 'Dbbb'</b>						
Alle	963	129,2	13,42	16,55	61	0
GloCyte	927				1	0
Mikroskopi	785	7,07	0,901	5	2	0
Sysmex XN	969	128,1	13,21	16,82	58	0
<b>Csv-Kerneholdige celler; antalk. Sample 'CIII'</b>						
Alle	24	2,96	12,43	0,452	43	1
GloCyte	26				1	0
Sysmex XN	24	2,98	12,52	0,46	42	1
<b>Csv-Kerneholdige celler; antalk. Sample 'Dbbb'</b>						
Alle	33	5,74	17,49	0,865	44	0
GloCyte	41				1	0
Sysmex XN	33	5,66	17,36	0,863	43	0
<b>Csv-Leukocyter (mononukl.); antalk. Sample 'CIII'</b>						
Alle	14,4	2,26	15,65	0,299	57	2
Sysmex XN	14,4	2,26	15,65	0,299	57	2
<b>Csv-Leukocyter (mononukl.); antalk. Sample 'Dbbb'</b>						
Alle	15,8	4,55	28,8	0,587	60	0
Sysmex XN	15,8	4,55	28,8	0,587	60	0
<b>Csv-Leukocyter (polynukl.); antalk. Sample 'CIII'</b>						
Alle	8	1,897	22,4	0,247	59	0
Sysmex XN	8	1,897	22,4	0,247	59	0
<b>Csv-Leukocyter (polynukl.); antalk. Sample 'Dbbb'</b>						
Alle	14,4	4	27,8	0,521	59	1
Sysmex XN	14,4	4	27,8	0,521	59	1
<b>Csv-Leukocyter; antalk. Sample 'CIII'</b>						
Alle	22	3,42	15,19	0,577	35	1
Sysmex XN	22	3,42	15,19	0,577	35	1
<b>Csv-Leukocyter; antalk. Sample 'Dbbb'</b>						
Alle	28	8,06	28,5	1,325	37	0
Sysmex XN	28	8,06	28,5	1,325	37	0
<b>Lkcs(Csv)-Leukocyter (mononukl.); antalfr. Sample 'CIII'</b>						
Alle	62	5,88	9,51	0,918	41	1
Sysmex XE	65	12,23	18,92	8,65	2	0
Sysmex XN	62	5,66	9,17	0,906	39	1
<b>Lkcs(Csv)-Leukocyter (mononukl.); antalfr. Sample 'Dbbb'</b>						
Alle	52	7,6	14,63	1,159	43	0
Sysmex XE	57	0,778	1,375	0,55	2	0
Sysmex XN	52	7,72	14,92	1,205	41	0
<b>Lkcs(Csv)-Leukocyter (polynukl.); antalfr. Sample 'CIII'</b>						
Alle	38	5,87	15,36	0,917	41	1
Sysmex XE	27				1	0
Sysmex XN	38	5,64	14,66	0,892	40	1
<b>Lkcs(Csv)-Leukocyter (polynukl.); antalfr. Sample 'Dbbb'</b>						
Alle	48	7,6	15,82	1,159	43	0
Sysmex XE	43				1	0
Sysmex XN	48	7,65	15,88	1,181	42	0

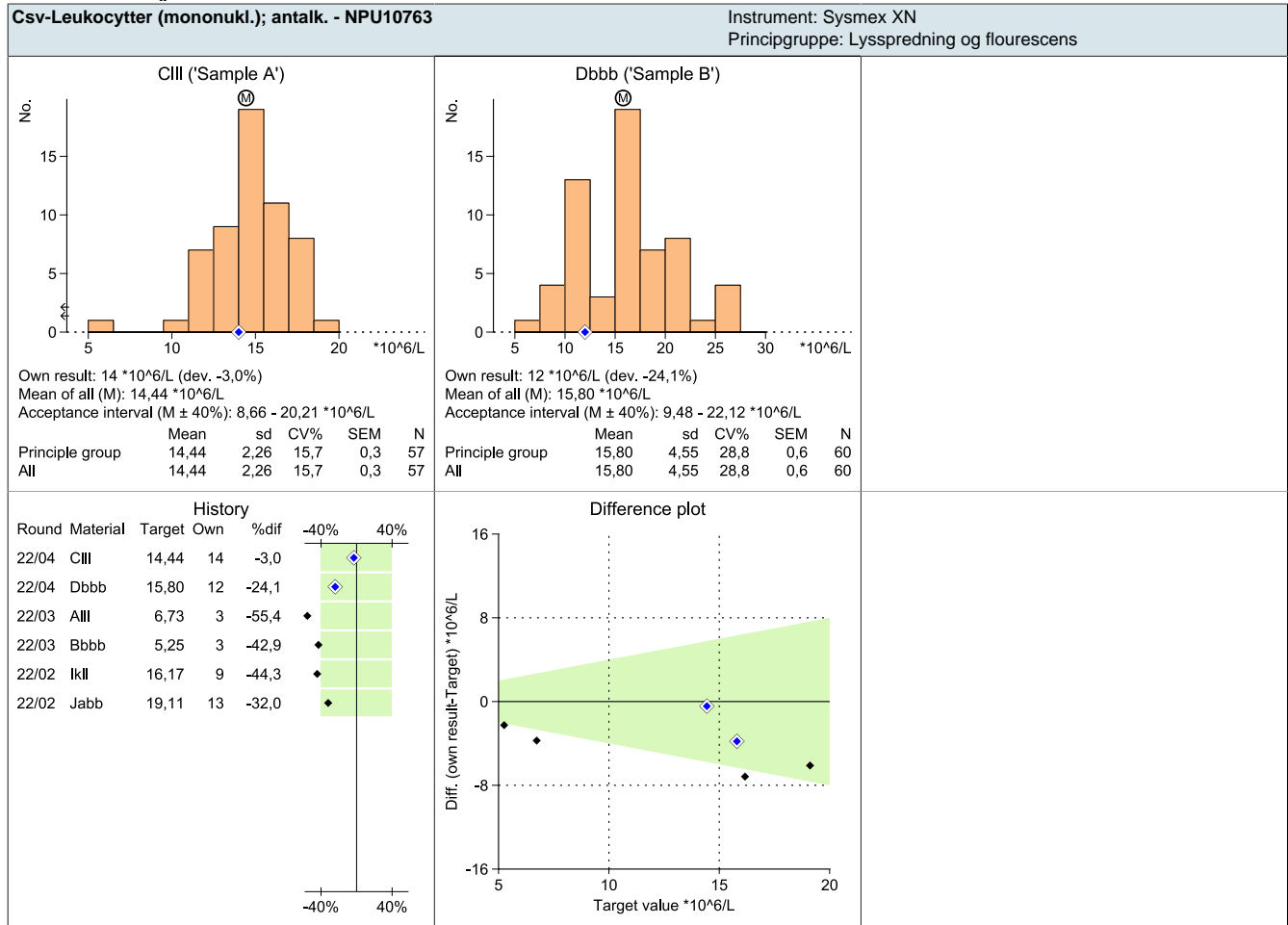
**Metodesæt 2 ( )**



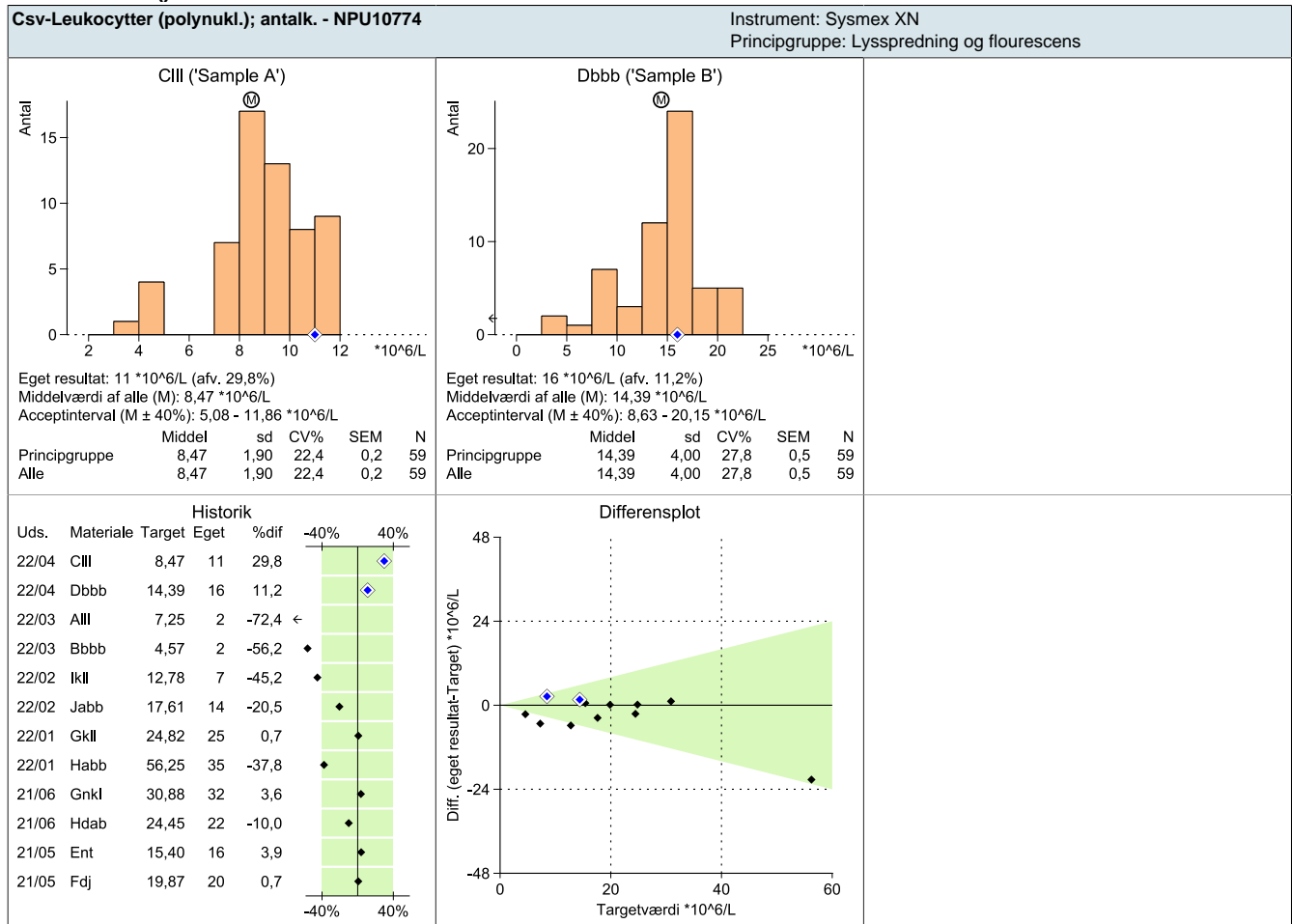
**Metodesæt 1 ( )**



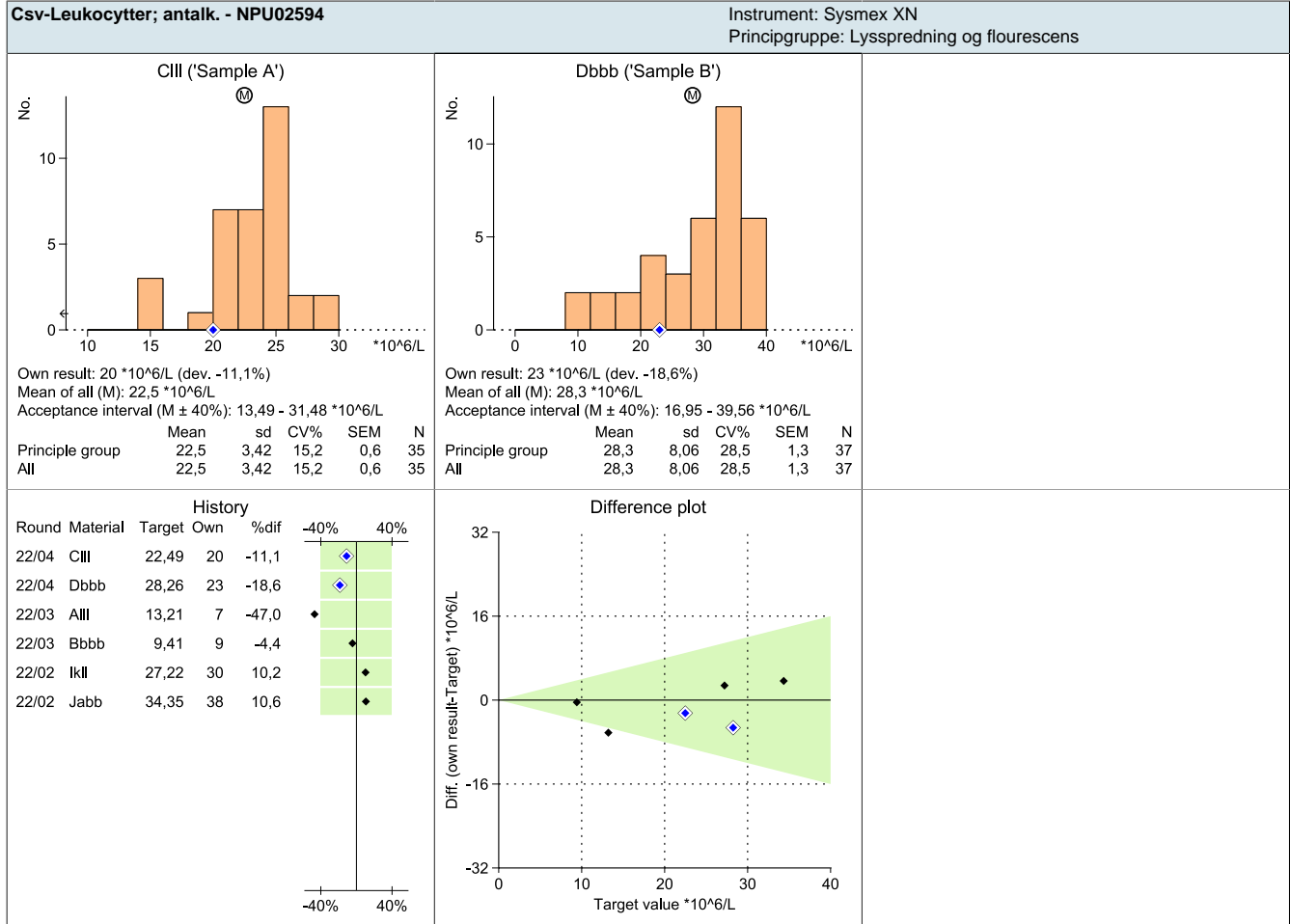
**Metodesæt 1 ( )**



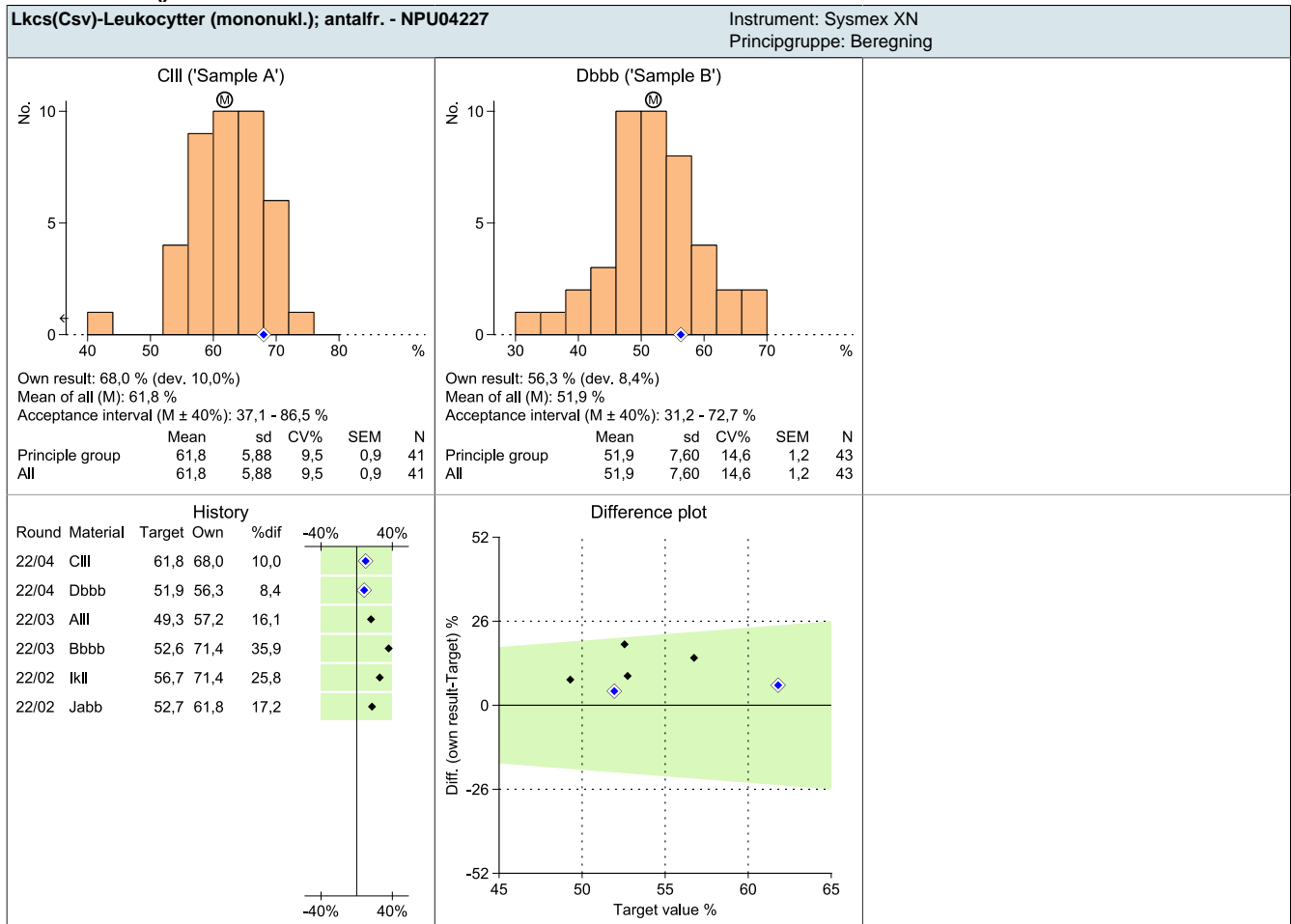
**Metodesæt 1 ( )**



**Metodesæt 2 ( )**



**Metodesæt 1 ( )**



**Metodesæt 4 ( )**

