

Leucocyte Immunophenotyping



Sample - 033

Distribution - 161705



Date Issued - 24 January 2017



Closing Date - 13 February 2017



Participant ID - 4XXXX



Machine Used - Aquios



Trial Comments

This trial was issued to 28 participants.



Sample Comments

The sample was manufactured by UKNEQAS LI using stabilised blood



Absolute Values Results and Performance

Cell Population	Your Results (cells/ μ L)	Robust Mean (cells/ μ L)	Robust SD (cells/ μ L)
CD3+ Lymphocytes	457.00	455.08	21.41
CD3+/CD4+ Lymphocytes	118.00	128.69	8.87
CD3+/CD8+ Lymphocytes	310.00	302.38	14.93
CD19+ Lymphocytes	132.00	136.17	4.92
CD16+/CD56+ Lymphocytes	156.00	153.55	8.64

Cell Population	z Score*	Performance Status for this Sample	Performance Status Classification Over 12 Sample Period		
			Satisfactory	Action	Critical
CD3+ Lymphocytes	0.09	Satisfactory	7	0	0
CD3+/CD4+ Lymphocytes	-1.21	Satisfactory	7	0	0
CD3+/CD8+ Lymphocytes	0.51	Satisfactory	7	0	0
CD19+ Lymphocytes	-0.85	Satisfactory	7	0	0
CD16+/CD56+ Lymphocytes	0.28	Satisfactory	7	0	0

Percentage Values Results and Performance

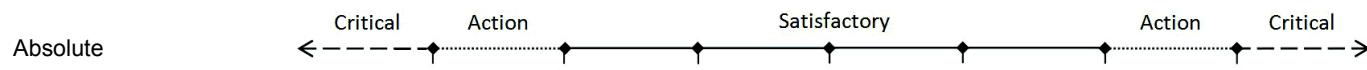
Cell Population	Your Results %	Robust Mean %	Robust SD %
CD3+ Lymphocytes	60.09	60.44	1.38
CD3+/CD4+ Lymphocytes	15.55	17.28	0.62
CD3+/CD8+ Lymphocytes	40.64	40.39	1.01
CD19+ Lymphocytes	17.32	17.96	0.82
CD16+/CD56+ Lymphocytes	20.58	20.21	0.42

Cell Population	z Score*	Performance Status for this Sample	Performance Status Classification Over 12 Sample Period		
			Satisfactory	Action	Critical
CD3+ Lymphocytes	-0.25	Satisfactory	7	0	0
CD3+/CD4+ Lymphocytes	-2.79	Action	6	1	0
CD3+/CD8+ Lymphocytes	0.25	Satisfactory	6	1	0
CD19+ Lymphocytes	-0.78	Satisfactory	7	0	0
CD16+/CD56+ Lymphocytes	0.88	Satisfactory	6	1	0

*z Score Limits Definitions



Please note the scale below is applicable to the tables above and to the z score histograms and Shewhart control charts that follow. It is not applicable to the Cusum control charts.

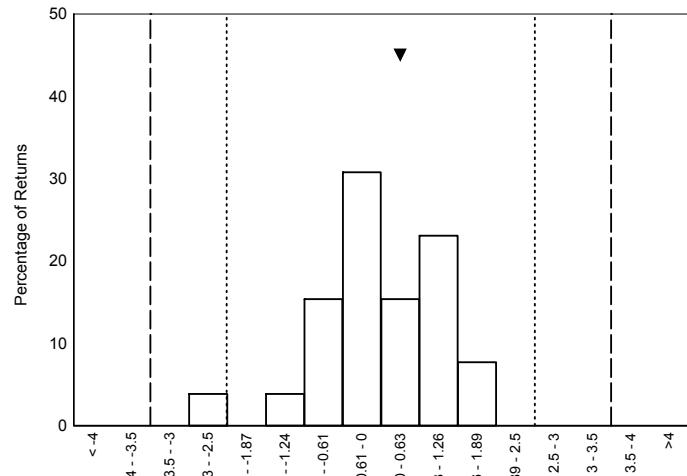




Histograms of Participant z Scores

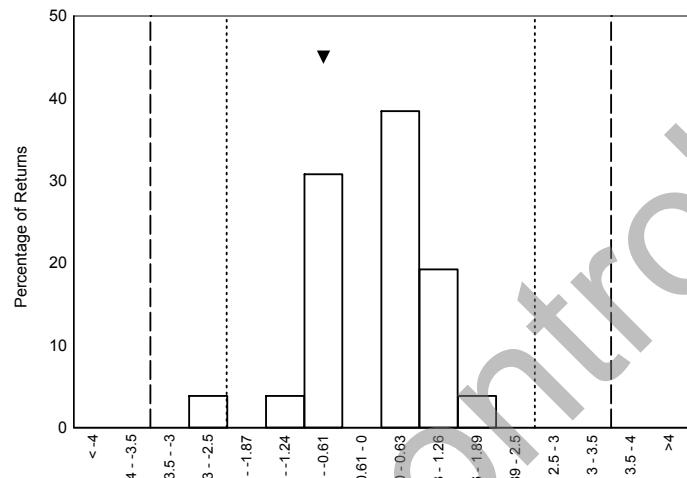
Absolute Values (cells/ μ L) - CD3+ Lymphocytes

Please note ▼ denotes your result



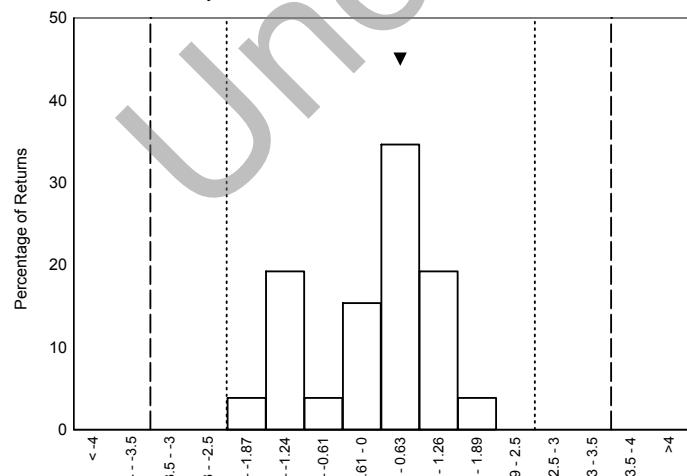
Absolute Values (cells/ μ L) - CD3+/CD4+ Lymphocytes

Please note ▼ denotes your result



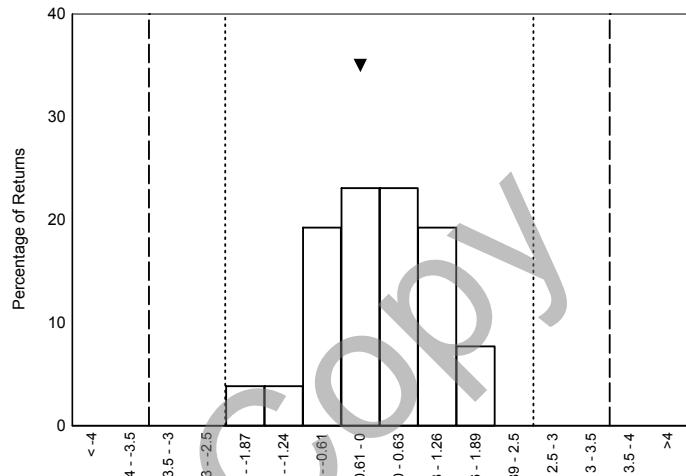
Absolute Values (cells/ μ L) - CD3+/CD8+ Lymphocytes

Please note ▼ denotes your result



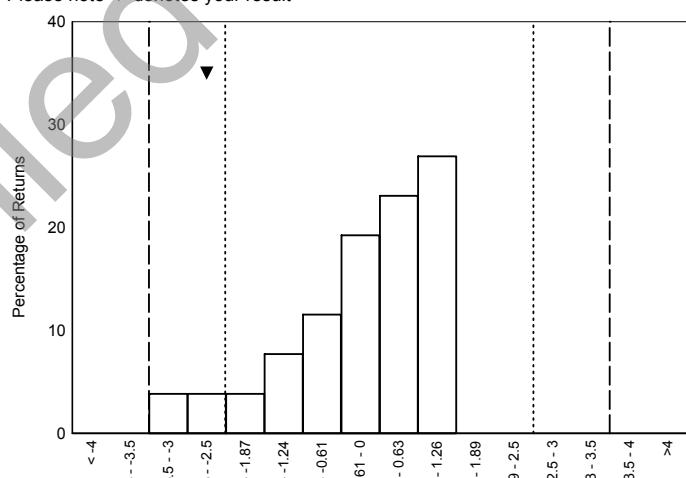
Percentage Values (%) - CD3+ Lymphocytes

Please note ▼ denotes your result



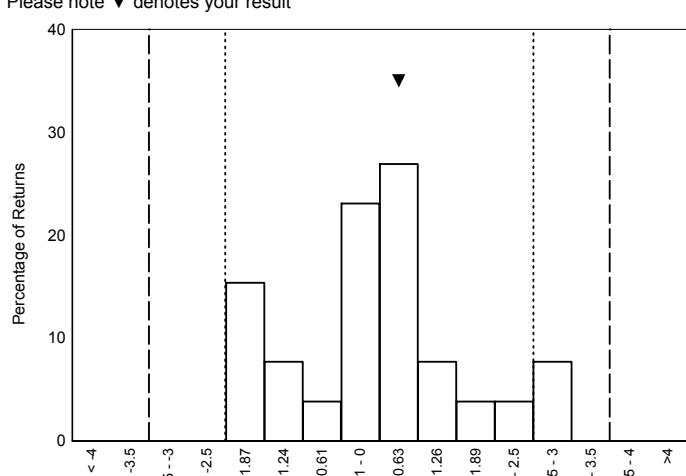
Percentage Values (%) - CD3+/CD4+ Lymphocytes

Please note ▼ denotes your result



Percentage Values (%) - CD3+/CD8+ Lymphocytes

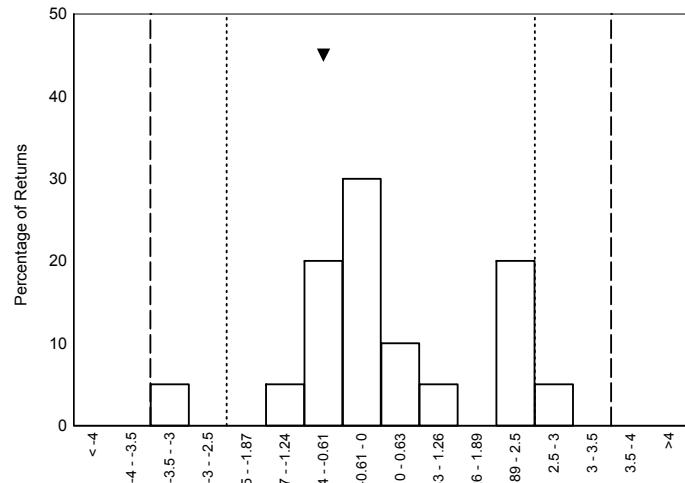
Please note ▼ denotes your result



Histograms of Participant z Scores

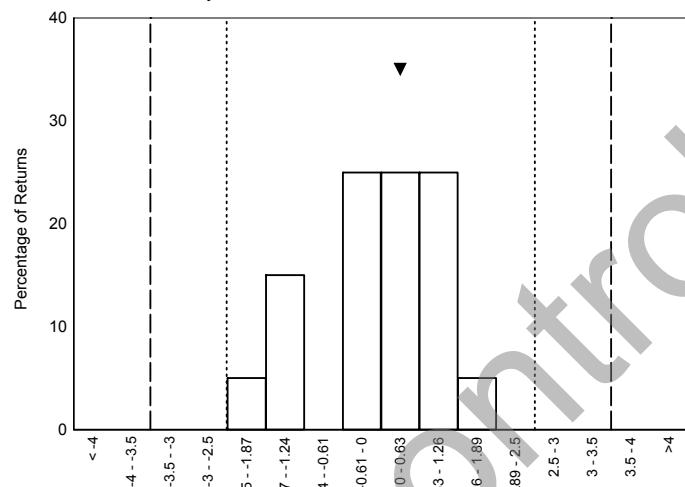
Absolute Values (cells/ μ L) - CD19+ Lymphocytes

Please note ▼ denotes your result



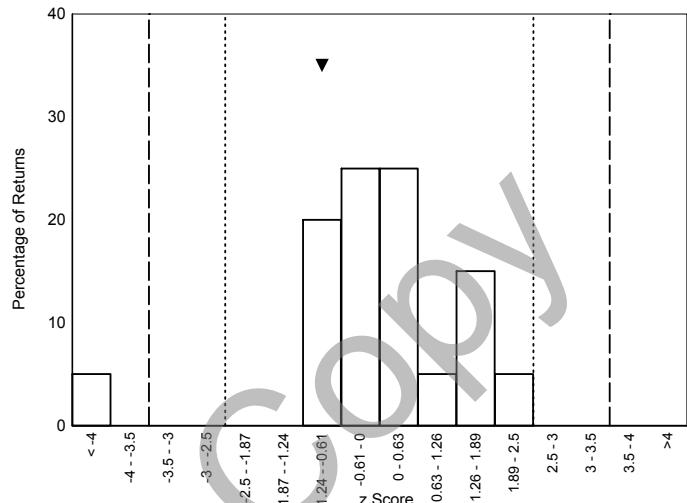
Absolute Values (cells/ μ L) - CD16+/CD56+ Lymphocytes

Please note ▼ denotes your result



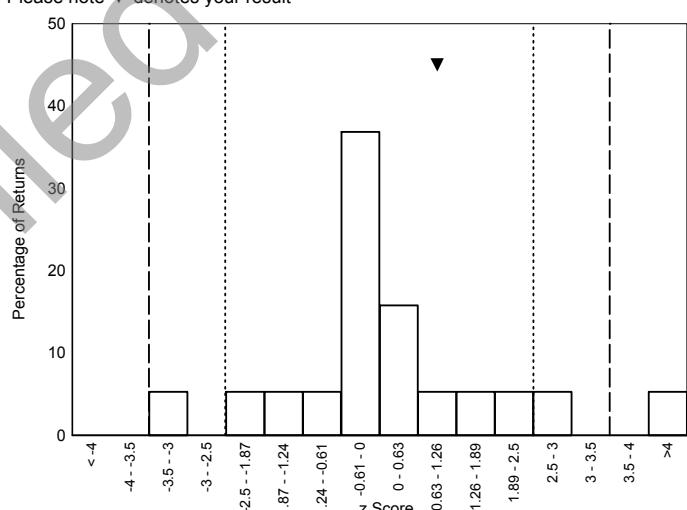
Percentage Values (%) - CD19+ Lymphocytes

Please note ▼ denotes your result



Percentage Values (%) - CD16+/CD56+ Lymphocytes

Please note ▼ denotes your result



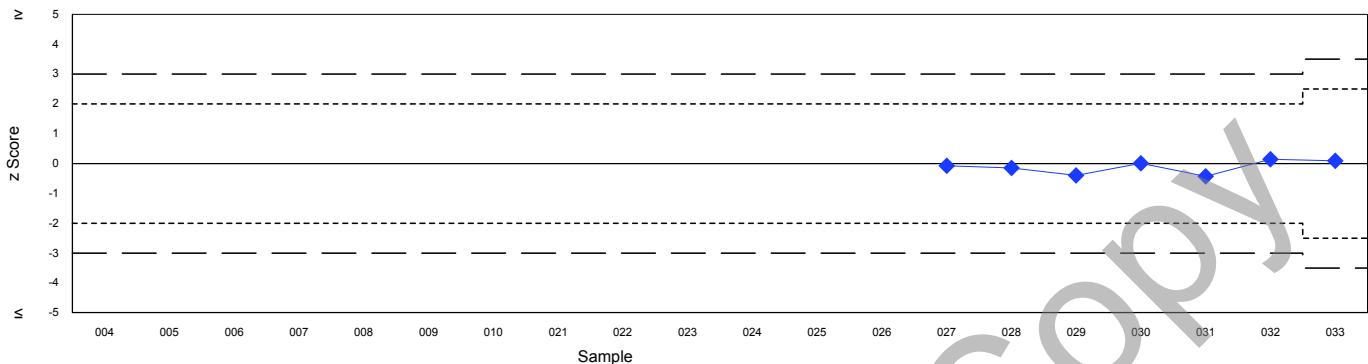
Leucocyte Immunophenotyping

Shewhart Control Charts

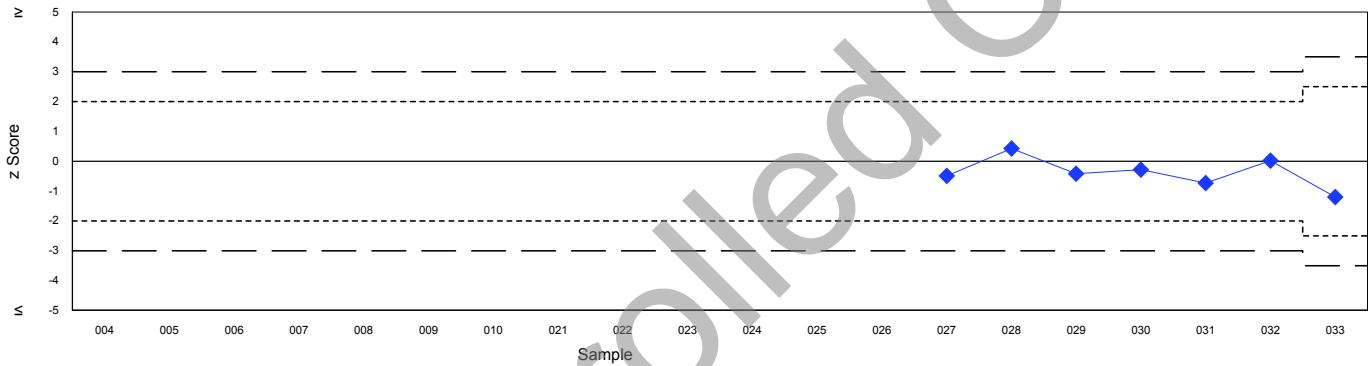
(Please note each data point represents a single sample)

Absolute Values (cells/ μ L)

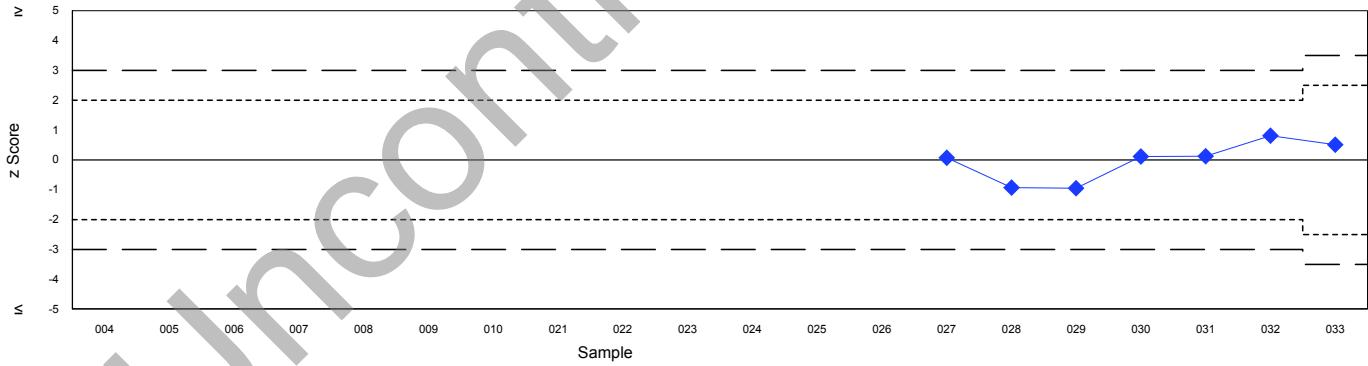
CD3+ Lymphocytes



CD3+/CD4+ Lymphocytes

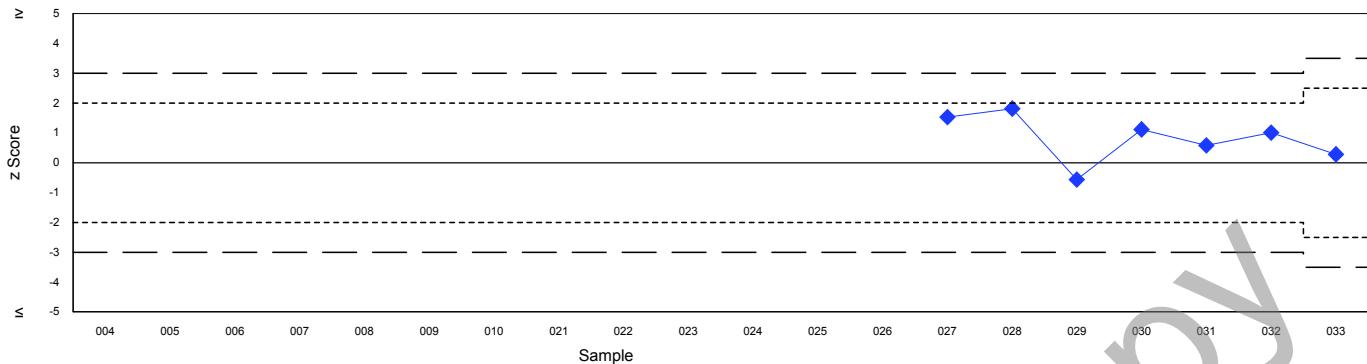


CD3+/CD8+ Lymphocytes

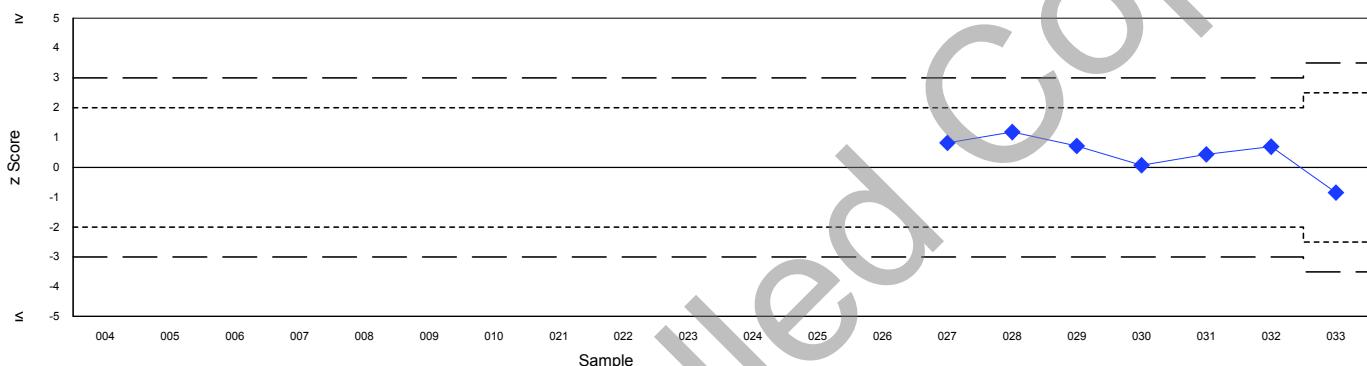


Leucocyte Immunophenotyping

CD16+/CD56+ Lymphocytes



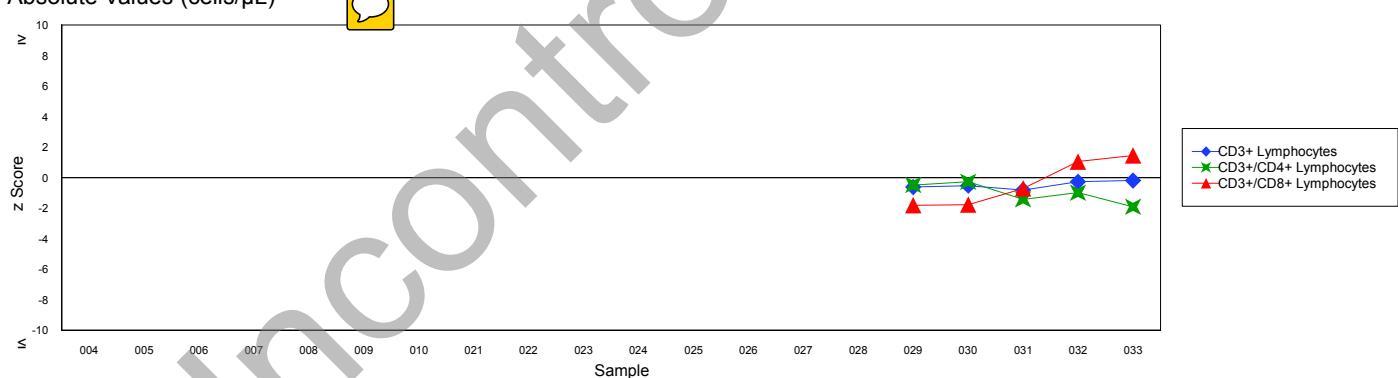
CD19+ Lymphocytes



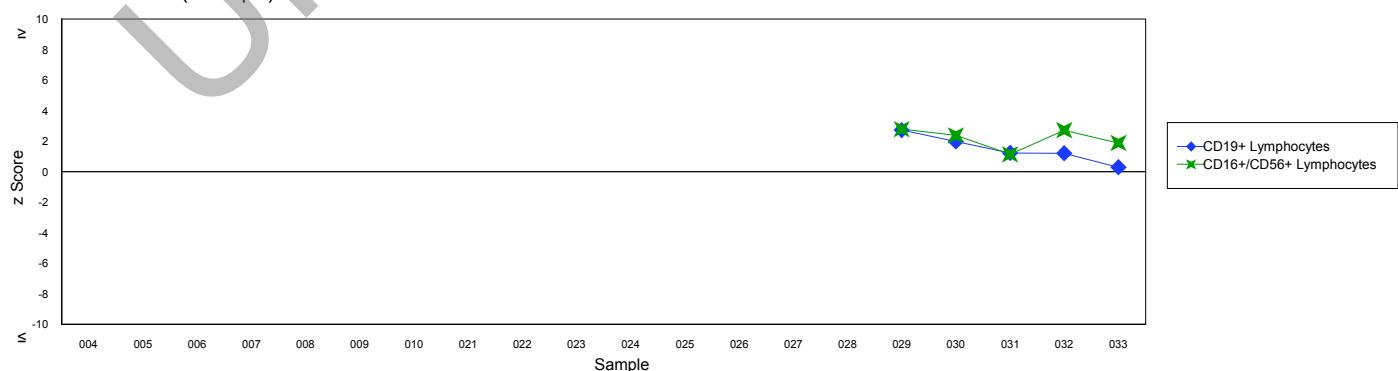
Cusum Control Charts

(Please note each data point represents the sum of the z scores of the current sample and the two previous samples)

Absolute Values (cells/ μ L)



Absolute Values (cells/ μ L)



Leucocyte Immunophenotyping

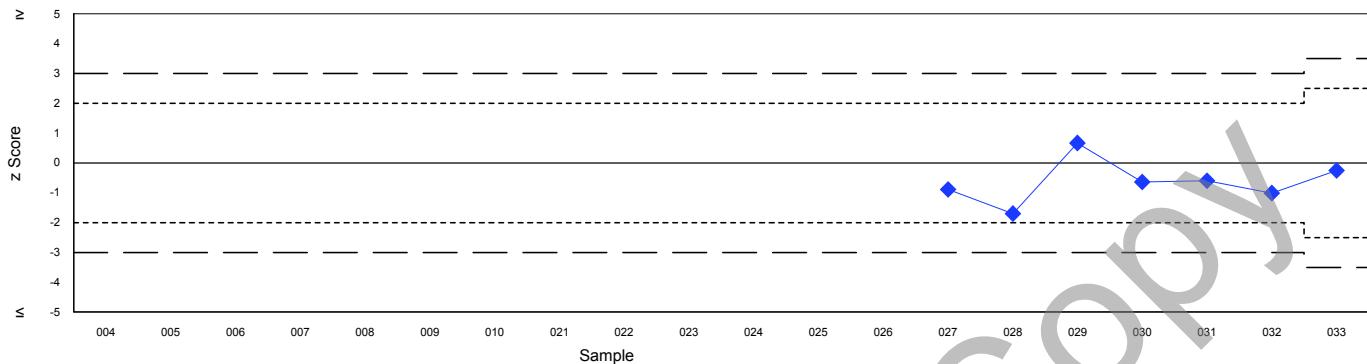
Shewhart Control Charts

(Please note each data point represents a single sample)

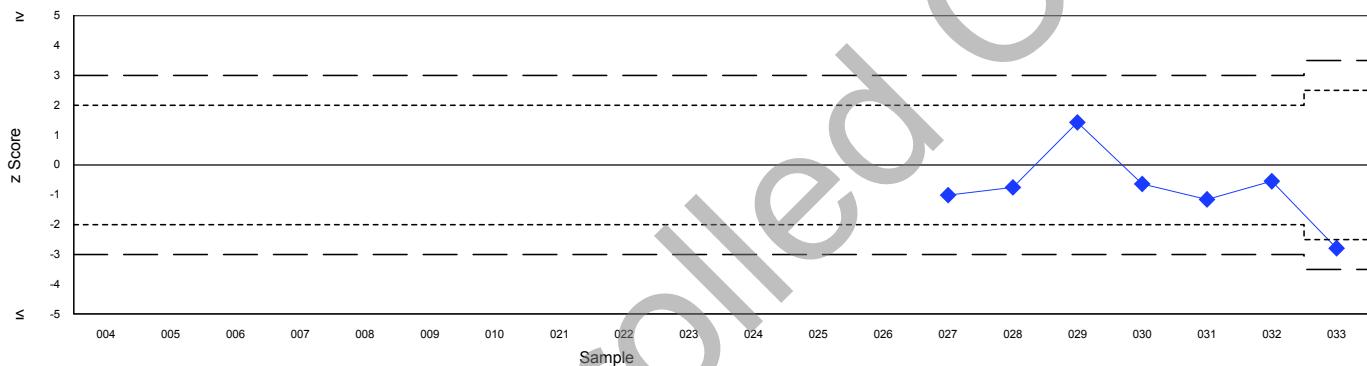
Percentage Values (%)



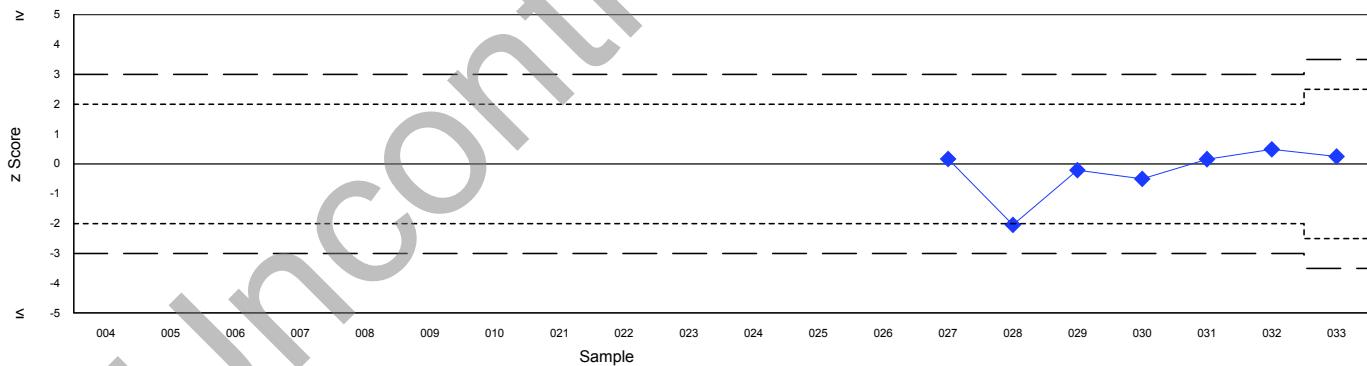
CD3+ Lymphocytes



CD3+/CD4+ Lymphocytes

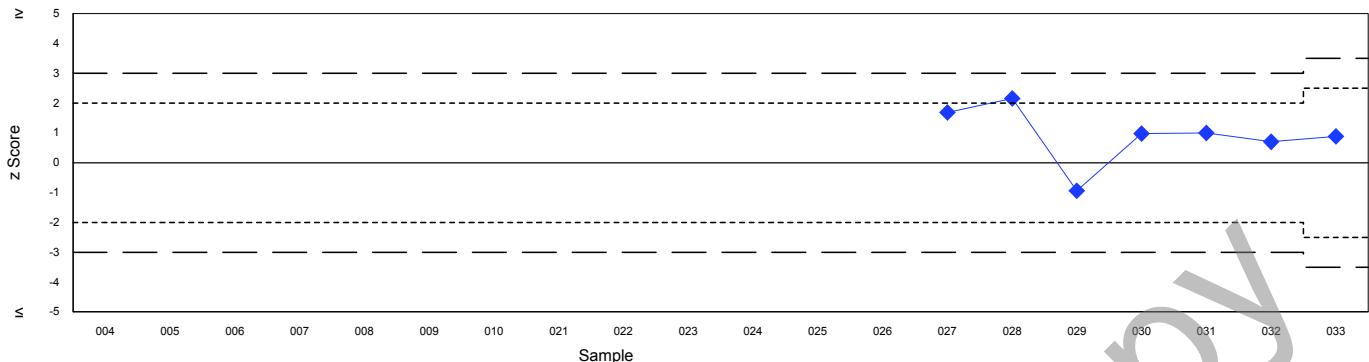


CD3+/CD8+ Lymphocytes

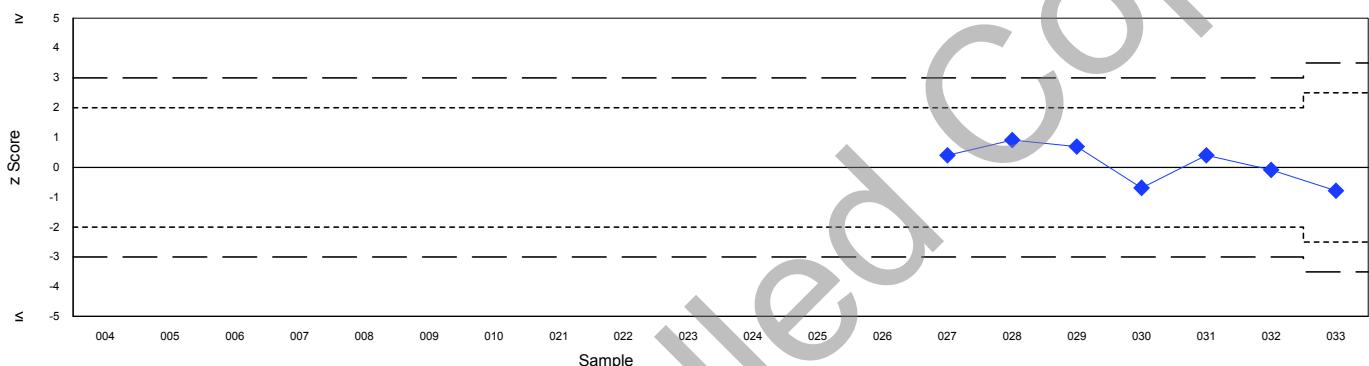


Leucocyte Immunophenotyping

CD16+/CD56+ Lymphocytes

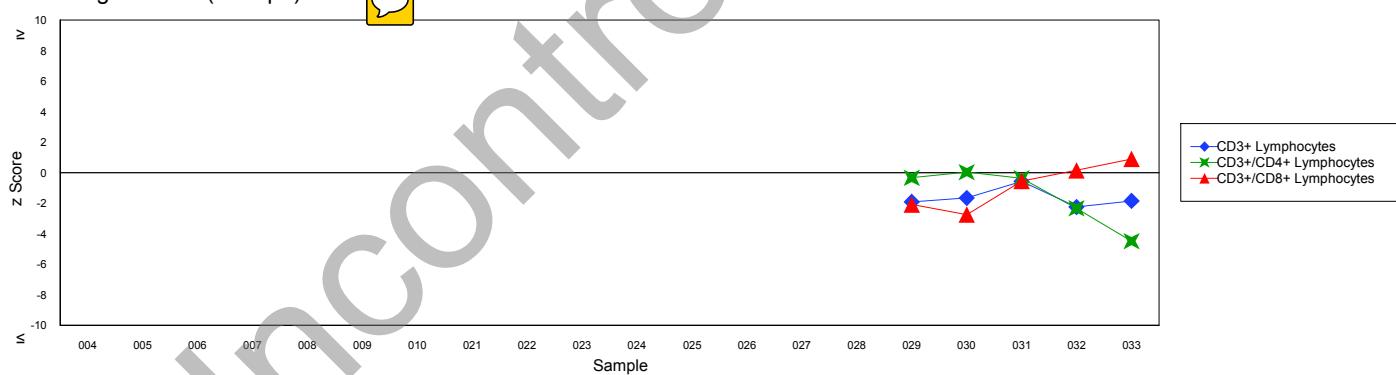
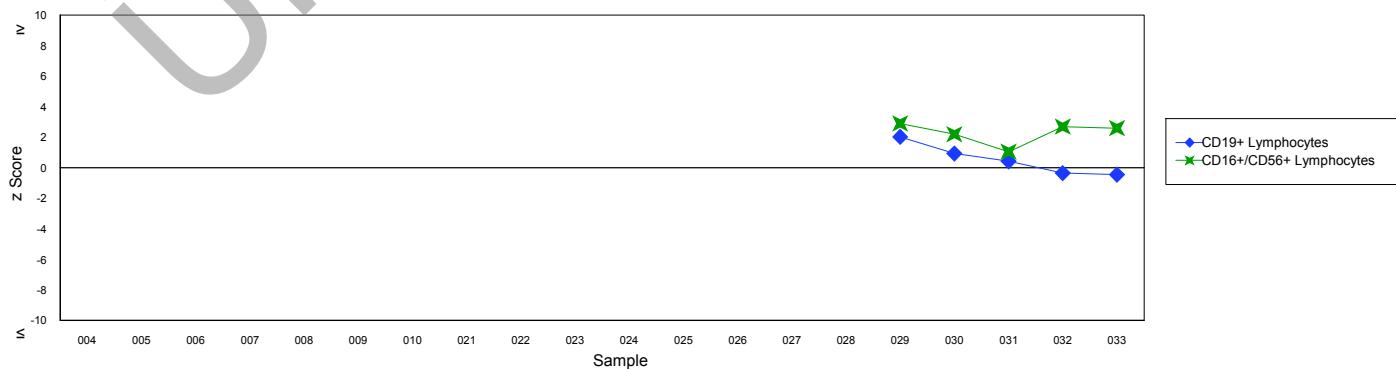


CD19+ Lymphocytes



Cusum Control Charts

(Please note each data point represents the sum of the z scores of the current sample and the two previous samples)

Percentage Values (cells/ μ L)Percentage Values (cells/ μ L)

Leucocyte Immunophenotyping



Platform Specific Statistics

(Please note only groups of >5 returns are displayed)

Method	Absolute Count Values (cells/ μ L)			Percentage Values		
	Returns	Robust Mean	Robust SD	Returns	Robust Mean	Robust SD
	-	-	-	-	-	-

Antibody Manufacturer Specific Statistics



(Please note only groups of >5 returns are displayed)

CD3+ Lymphocytes	Absolute Count Values (cells/ μ L)			Percentage Values		
	Returns	Robust Mean	Robust SD	Returns	Robust Mean	Robust SD
Beckman Coulter	25	455.1	21.4	25	60.4	1.4

CD3+/CD4+ Lymphocytes	Absolute Count Values (cells/ μ L)			Percentage Values		
	Returns	Robust Mean	Robust SD	Returns	Robust Mean	Robust SD
Beckman Coulter	25	128.7	8.9	25	17.3	0.6

CD3+/CD8+ Lymphocytes	Absolute Count Values (cells/ μ L)			Percentage Values		
	Returns	Robust Mean	Robust SD	Returns	Robust Mean	Robust SD
Beckman Coulter	25	302.4	14.9	25	40.4	1.0

CD19+ Lymphocytes	Absolute Count Values (cells/ μ L)			Percentage Values		
	Returns	Robust Mean	Robust SD	Returns	Robust Mean	Robust SD
Beckman Coulter	19	136.2	4.9	19	18.0	0.8

CD16+/CD56+ Lymphocytes	Absolute Count Values (cells/ μ L)			Percentage Values		
	Returns	Robust Mean	Robust SD	Returns	Robust Mean	Robust SD
Beckman Coulter	19	153.6	8.6	18	20.2	0.4

Antibody Fluorochrome Specific Statistics

(Please note only groups of >5 returns are displayed)

Method	Absolute Count Values (cells/ μ L)			Percentage Values		
	Returns	Robust Mean	Robust SD	Returns	Robust Mean	Robust SD
	-	-	-	-	-	-

Leucocyte Immunophenotyping



Flow Cytometer Specific Statistics

(Please note only groups of >5 returns are displayed)

CD3+ Lymphocytes		Absolute Count Values (cells/µL)			Percentage Values		
Method	Returns	Robust Mean	Robust SD	Returns	Robust Mean	Robust SD	
Aquios	24	454.2	21.6	24	60.4	1.4	
CD3+/CD4+ Lymphocytes		Absolute Count Values (cells/µL)			Percentage Values		
Method	Returns	Robust Mean	Robust SD	Returns	Robust Mean	Robust SD	
Aquios	24	128.3	8.9	24	17.2	0.7	
CD3+/CD8+ Lymphocytes		Absolute Count Values (cells/µL)			Percentage Values		
Method	Returns	Robust Mean	Robust SD	Returns	Robust Mean	Robust SD	
Aquios	24	302.5	14.9	24	40.5	0.9	
CD19+ Lymphocytes		Absolute Count Values (cells/µL)			Percentage Values		
Method	Returns	Robust Mean	Robust SD	Returns	Robust Mean	Robust SD	
Aquios	18	136.0	5.1	18	18.0	0.9	
CD16+/CD56+ Lymphocytes		Absolute Count Values (cells/µL)			Percentage Values		
Method	Returns	Robust Mean	Robust SD	Returns	Robust Mean	Robust SD	
Aquios	18	153.4	8.6	17	20.2	0.5	

Gating Strategy Specific Statistics

(Please note only groups of >5 returns are displayed)

		Absolute Count Values (cells/µL)			Percentage Values		
Method	Returns	Robust Mean	Robust SD	Returns	Robust Mean	Robust SD	
	-	-	-	-	-	-	-