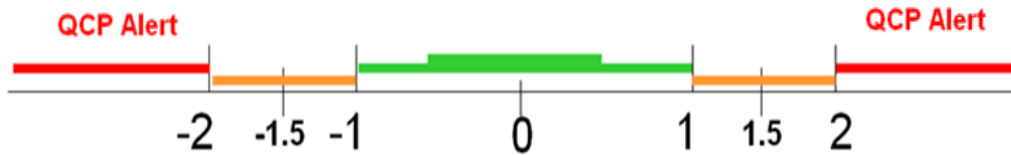




# Case Studies

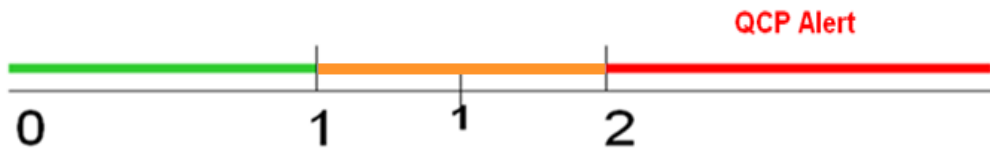
## Accuracy :



For **Accuracy**, the range of Z-score is between **-1** And **1**.

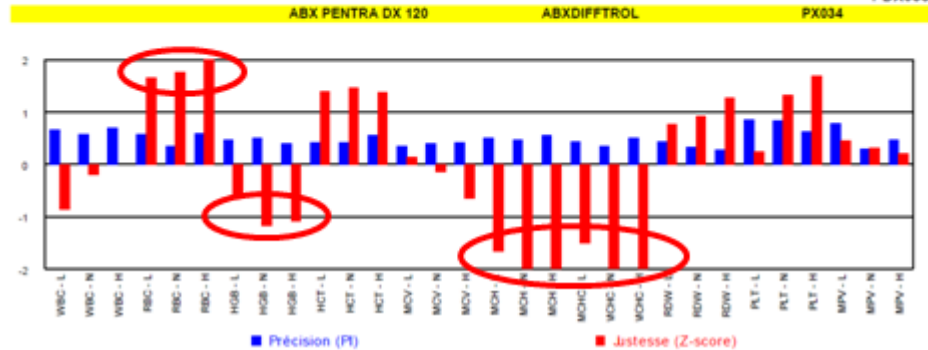
If the values **exceed -2** and **2**, the QCP will report an **alert**.

## Precision :



Concerning the **Precision**, the range of Precision Index (PI) to achieve is between **0** and **1**.

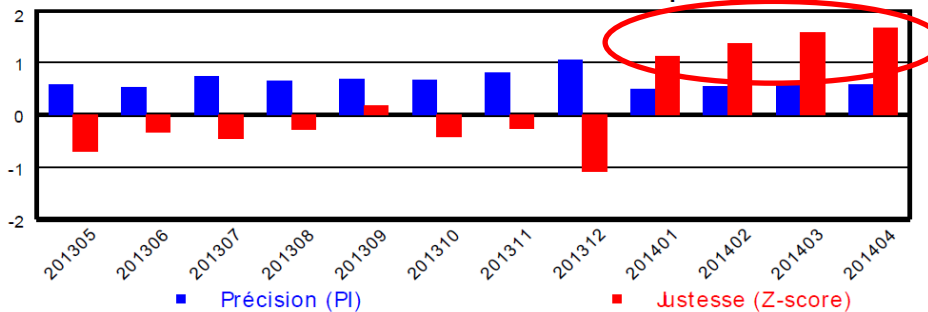
If values **exceed 2**, the QCP will report an **alert**.



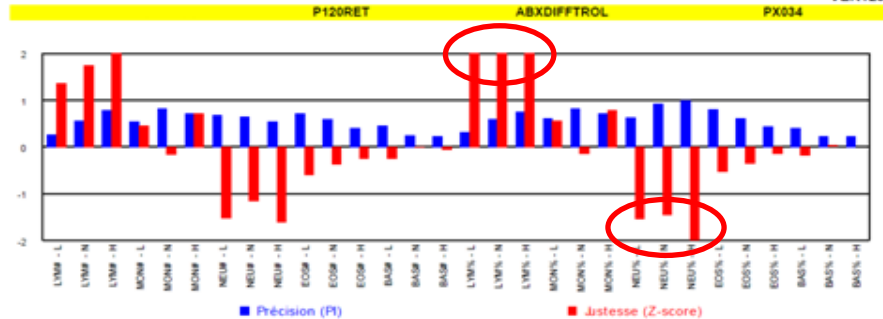
**Precision:** PI is correct which means that there is a **good mastery of the control**.

**Accuracy:** Z-score indices is too high on GR and too low on HGB, which induces **excessively negative values** of the calculated parameters MCH / MCHC.

Evolution mensuelle des indices de comparaison

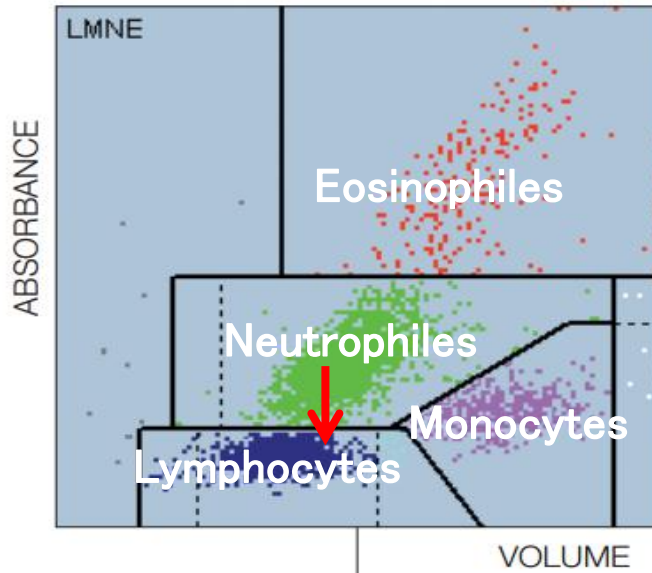


The review of the **History of uncertainties** report, shows that the accuracy issue started 4 months ago.

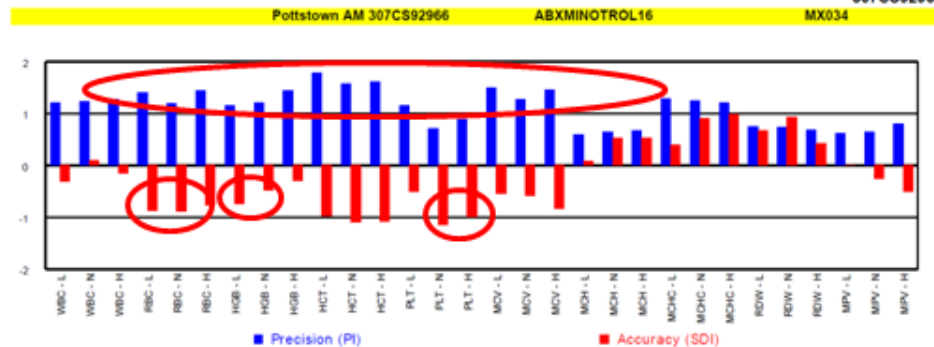


**Precision:** the values are **correct** because the values are in the range of 0 and 1.

**Accuracy:** The values are **very strong** on lymphocytes and **very low** on neutrophils.



You must **check the distribution matrix** (optical gain) because it can come from a poor definition of the zone of neutrophils that can be counted as lymphocytes.



**Precision:** Accuracy is **not acceptable**, it exceeds the value of 1 for too many parameters.

**Accuracy:** Although the Z-score is less than 1, **too many parameters** show a **lack of accuracy**.

**Recalibration** would be desirable after determining causes of error that caused the lack of precision.



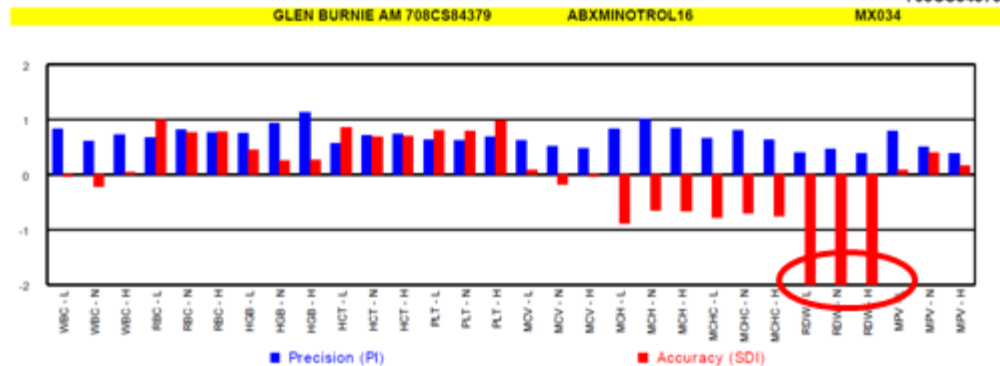
## Performances, Comparisons and Uncertainties



ABX Micros - Minotrol 16 - World

April 2014 - PRELIMINARY  
ABX Micros 60  
ABX Minotrol 16  
MX034

GLEN BURNIE AM 708CS84379  
708CS84379



**Precision:** Accuracy is correct.

**Accuracy:** it is necessary to review the setting for the RDW because all the values reach the threshold of -2.

## Performances, Comparisons and Uncertainties

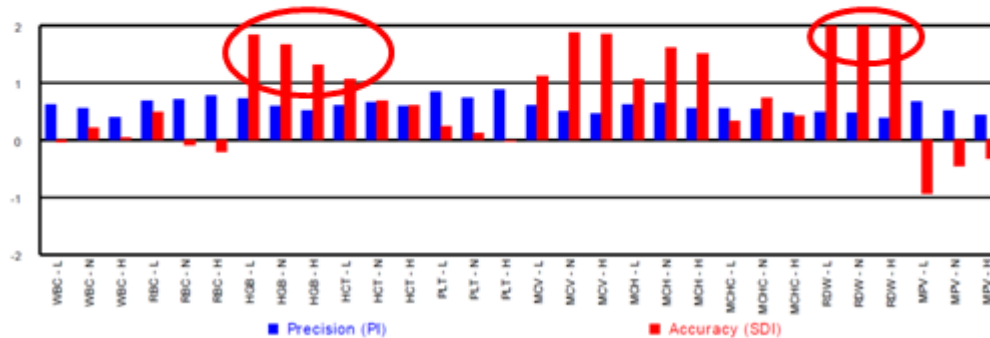


ABX Micros - Minotrol 16 - World

April 2014 - PRELIMINARY  
ABX Micros 60  
ABX Minotrol 16  
MX034

OWINGS MILLS AM 705CS84080  
705CS84080

OWINGS MILLS AM 705CS84080      ABXMINOTROL16      MX034



**Precision:** Accuracy is **correct**, the use of control is well handled.

**Accuracy:**

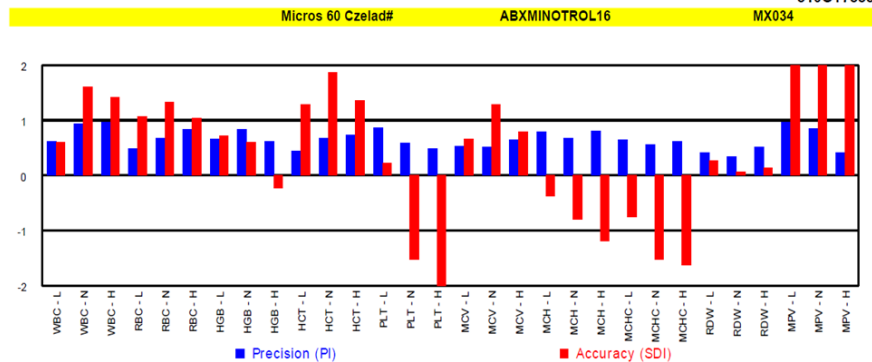
- The values are **too high** for the HGB and HCT.
- **RDW** values are **2**, a **new setting** is necessary for this parameter.

By adjusting the HGB, the MCV will decrease too.

ABX Micros - Minotrol 16 - World

April 2014 - PRELIMINARY  
 ABX Micros 60  
 ABX Minotrol 16  
 MX034

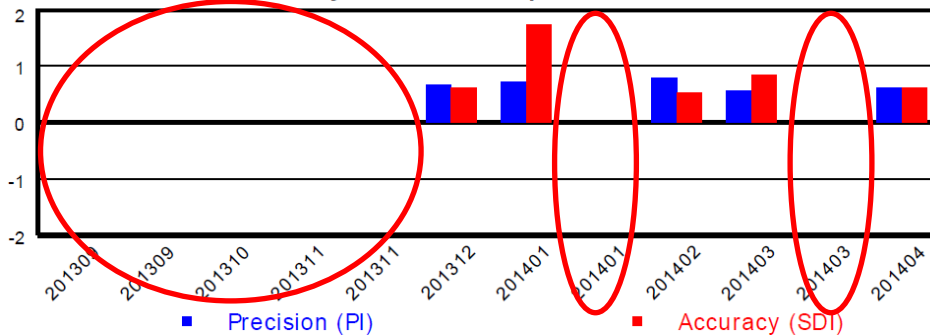
Micros 60 Czelad#  
 3100T73337



**Precision:** Precision is correct.

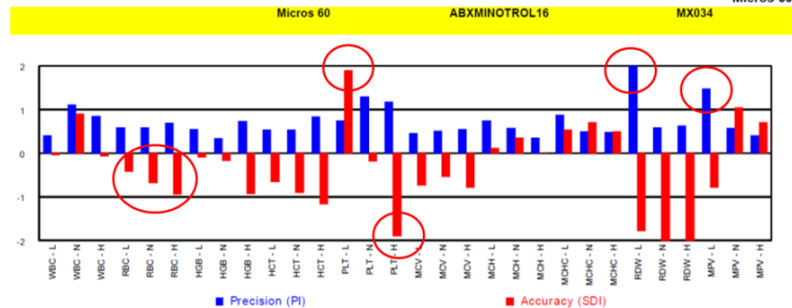
**Accuracy:** The accuracy requires adjustments to the WBC, RBC and PLT settings.

Monthly Trend of Comparison Indexes



After studying the **history of uncertainties** report, we can see a **lack of regularity** in the shared data sending with the QCP.

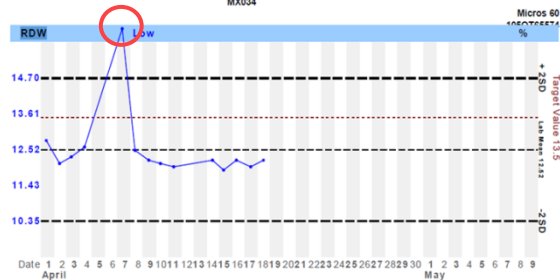




**Precision:** the performances are uneven, so you should check the detailed Levey Jennings to verify that there is not outliers values.

**Accuracy:**

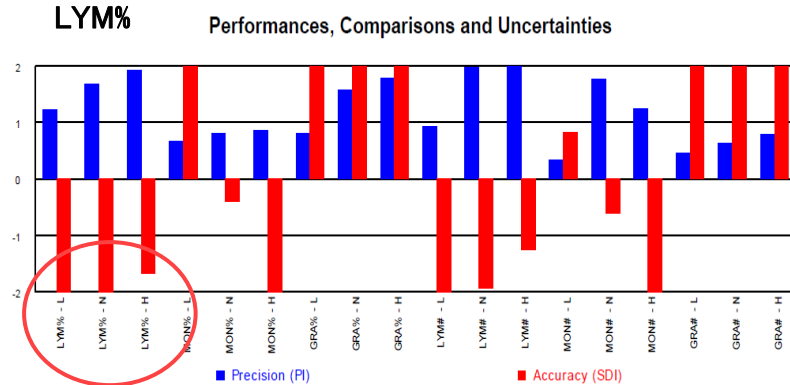
- an adjustment is required for GR to bring the values to 0.
- there is also a discordance between PLT(L) and PLT(H) (generally, the accuracy reduction should be gradual Lower level to High).



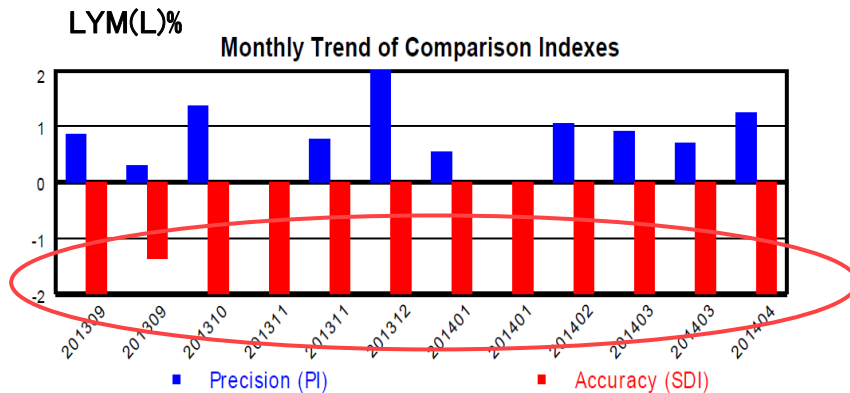
We can see on the Levey Jennings detailed that there is an outlier value (16.2) at day 7. This value alone, explains the excess of RDW precision.

CV = 8.6% with the value and CV = 2% without the outlier one.

Date	$\bar{x}$	Daily Results	Date	$\bar{x}$	Daily Results
1	12.80	12.9	1	12.20	12.2
2	12.10	12.1	2	12.20	12.2
3	12.30	12.3	3	12.20	12.2
4	12.60	12.6	4	12.20	12.2
5	12.20	12.2	5	12.20	12.2
6	12.20	12.2	6	12.20	12.2
7	16.20	16.2	7	12.20	12.2
8	12.50	12.5	8	12.20	12.2
9	12.20	12.2	9	12.20	12.2
10	12.10	12.1	10	12.20	12.2
11	12.00	12.0	11	12.20	12.2
12	12.20	12.2	12	12.20	12.2
13	12.20	12.2	13	12.20	12.2
14	12.20	12.2	14	12.20	12.2
15	11.90	11.9	15	12.20	12.2
16	12.20	12.2	16	12.20	12.2
17	12.00	12.0	17	12.20	12.2
18	12.20	12.2	18	12.20	12.2



**Accuracy:** There is a problem of accuracy, particularly with the LYM%.



We can see from the **history of uncertainties** report that this accuracy problem is observable throughout the **last 12 months**.



Thank you

