SpecBase: Accessing and managing mass spec data

Working with mass spectrometry in a clinical and/or pharmalogical setting requires time and resources. SpecBase is a new platform that ensures quality, efficiency and safety through database management of the large amount of data generated in the analytical process

The challenge of mass spectrometry

- Mass spectrometry (LCMSMS): state-of-the-art technology
- · Routine measurement of clinically important analytes
- Large amounts of data
- · Complex processes
- Many instrumental units
- Often in-house made developed methods
- Several types of instruments and manufacturers

The solution: SpecBase

Accumulates and validates the total amount of data generated in the process:

- Technical parameters from each of the different instruments
- Data regarding chemicals, calibration standards and quality controls
- Independent of instrument model or manufacturer

The effect

- Detailed documentation and traceability of the entire analytical workflow
- Automated technical and analytical validation
- A given test result may instantly be linked to instrument status and quality parameters at the time of analysis.
- Instant overview over the entire instrument park
- Early detection of instrumental errors
- Easy troubleshooting
- Optimization of routine maintenance
- Immediate instrument documention available for service personell
- Easy training of new personell



SpecBase has since 2012 been in use at The Hormone Laboratory, Haukeland University Hospital. The laboratory is accredited after ISO15189:2012



The inventor

 Ralf Kellmann a method developer at the Hormone Laboratory, at Haukeland University Hosptial

The project

- Financial support from Helse-Bergen and Helse -Vest
- Close collaboration between the inventor, the hospital IT-department and the routine staff at the
- laboratory

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