Life sciences use case

The following bullet points highlight the services that were utilized for the Life Sciences use case to identify melanoma biomarkers for patient stratification. These services were tested to harness the power of machine learning and computer-aided drug design to accelerate drug discovery and minimize expenses:

- NI4OS-Europe services were used to identify melanoma biomarkers for patient stratification.
- The BioConnect thematic service provided by NI4OS-Europe was used to harness the power of machine learning to exploit meta-analyses of genetic polymorphisms in cutaneous melanoma.
- The MelGene thematic service provided by the Cyprus Institute of Neurology and Genetics was used in conjunction with the BioConnect service to analyze melanoma data.
- The PARADOX-IV cluster service provided by NI4OS-Europe was utilized for high performance computing with GPU cards.
- The Archival Service provided by NI4OS-Europe was used for the archiving of scientific data.
- The Simple Storage Service provided by NI4OS-Europe was used to share data in a collaborative environment.
- The ChemBioServer, AFMM, Subtract, and FEPrepare thematic services provided by NI4OS-Europe were executed for computer-aided drug design to accelerate drug discovery and minimize expenses.
- The Generic Cloud Storage services provided by NI4OS-Europe were used to store all resulting data.

Complete information about the Life Science use case can be found in the use case documented in Zenodo as well as in the NI4OS-Europe training platform.