https://doi.org/10.6084/m9.figshare.8028836.v1

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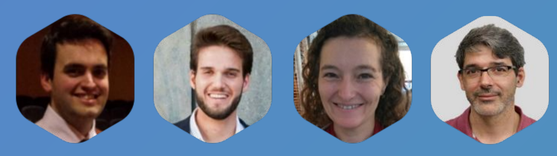

MGvizPMP: NGS-DNAseq analysis platform for Precision Medicine and Biomedical Research

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MGvizPMP is a Precision Medicine and Biomedical Research platform specialized in NGS data management, analysis and visualization. It is specifically designed to speed-up the NGS analysis and the creation of clinical reports for both germline diseases and cancer. It is a highly interactive web-based platform with professional UX and visualizations.

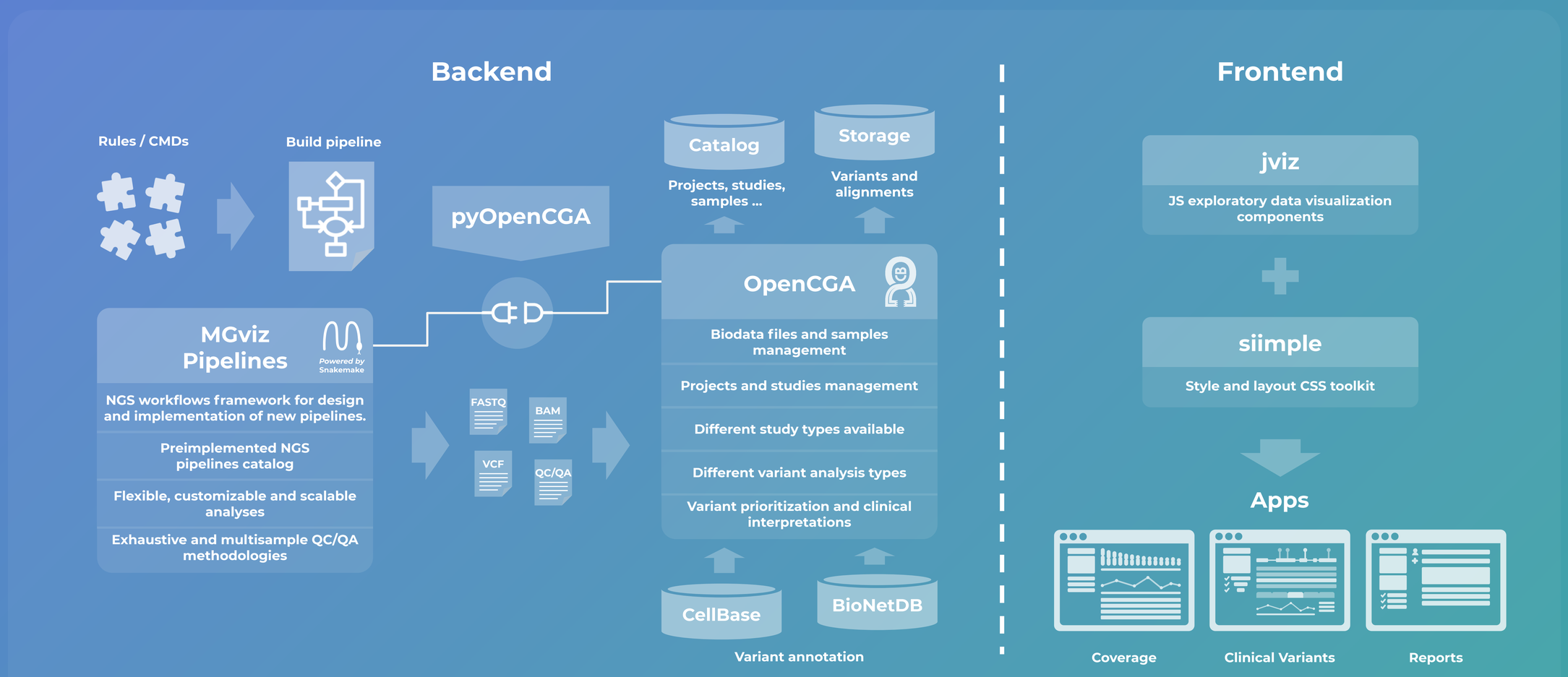
MGvizPMP implements a flexible and dynamic catalog of NGS pipelines to process sequencing data from FASTQs to VCFs. The workflows manage standard QC metrics for coverage, variant distribution, read mapping, variant quality and QC analyses, including comparing historic data to see the performance of the lab procedures over time.

MGvizPMP uses OpenCGA as backend, OpenCGA implements a powerful platform capable of managing millions of samples and provide other clinical relevant features such as an enriched clinical interpretation environment for variant prioritization and interactive report generation. The platform follows the mainstream international standards like the ESMO and the ACMG guidelines for variant interpretation and reporting.

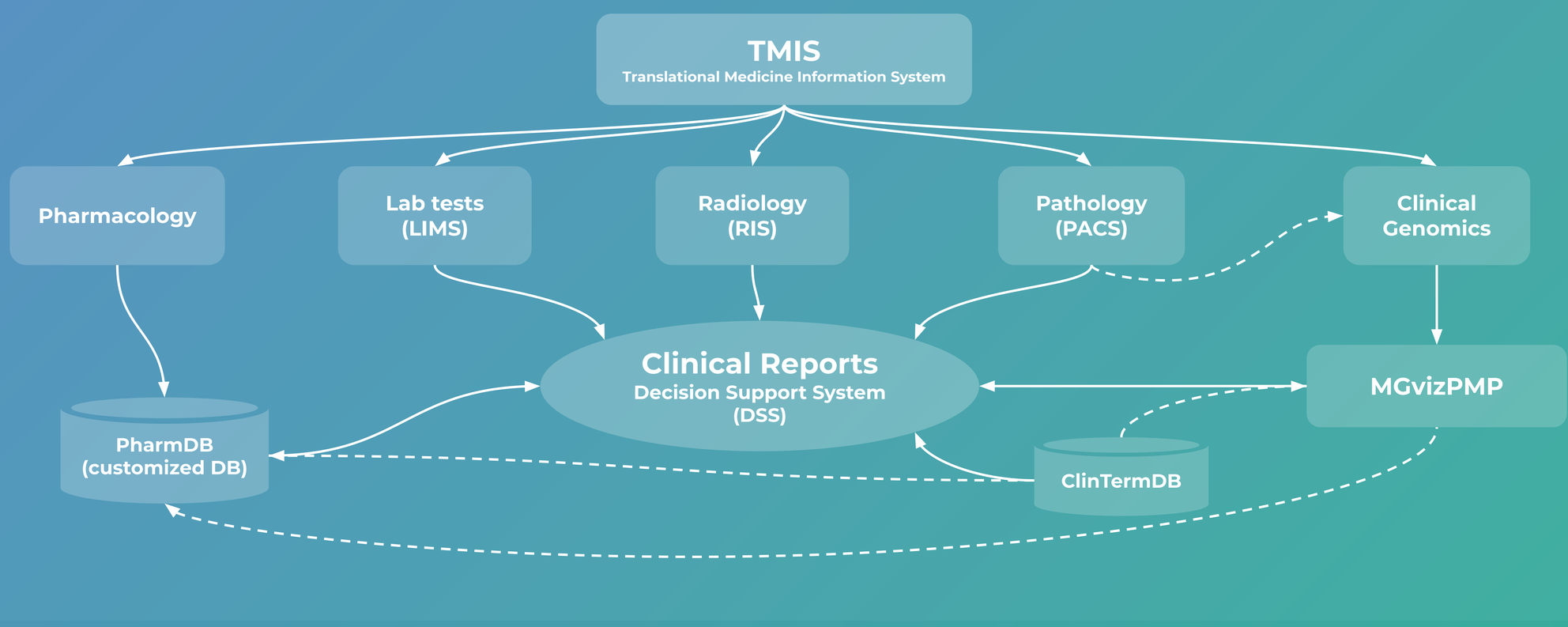
Here we present a professional platform for processing NGS data and generating semiautomatic clinical genetics reports.

Genomics is already a reality in clinical practice and we need better tools to help to create reports without great effort and easy to interpret. MGvizPMP fills the need and is suitable for both clinical and research practice helping researchers, clinicians and genetic counselors to create consistent and clear analyses and reports.

MGvizPMP Architecture



Integration of MGvizPMP in Kanteron TMIS



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