

# Quartet Data Portal User Guide for WGS Quality Assessment Report

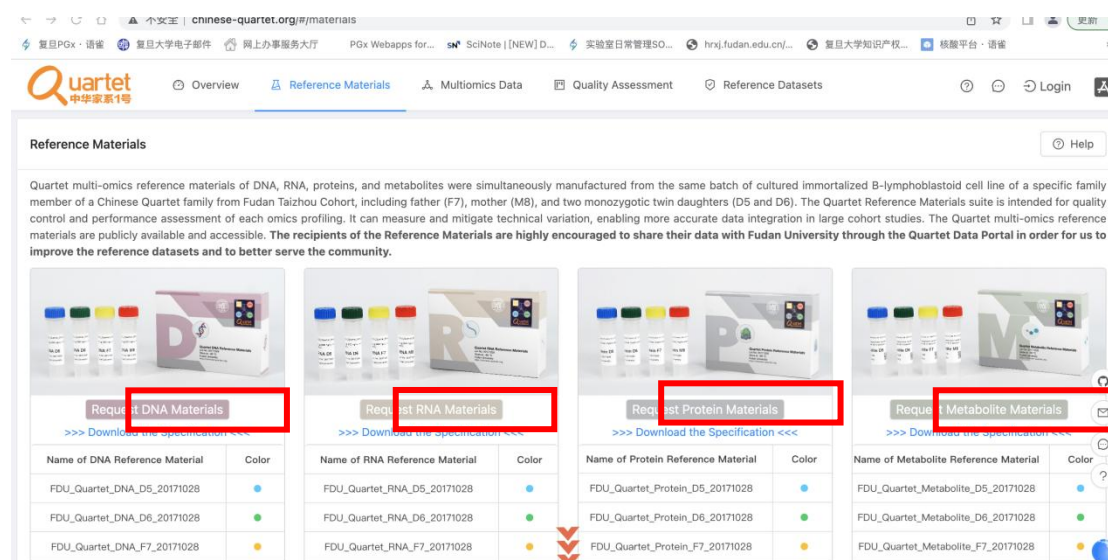
## 1. Preparation

QDP Address	<a href="https://chinese-quartet.org/">https://chinese-quartet.org/</a>
OSSUtil	<a href="https://docs.chinese-quartet.org/tools/ossutil/">https://docs.chinese-quartet.org/tools/ossutil/</a>
Input files	The file name suffix should be: _LCL5_R1.fastq.gz, _LCL5_R2.fastq.gz _LCL6_R1.fastq.gz, _LCL6_R2.fastq.gz _LCL7_R1.fastq.gz, _LCL7_R2.fastq.gz _LCL8_R1.fastq.gz, _LCL8_R2.fastq.gz

## 2. Log on to QDP

### 2.1 QDP account

1) If you have a request for the reference materials, please go to <http://chinese-quartet.org/#/materials> to request the reference materials. The Quartet team will contact you for further confirming your information and send you a registration email.



2) If you do not have a request for the reference materials, please send an email to [quartet@fudan.edu.cn](mailto:quartet@fudan.edu.cn) for a QDP account.

### 2.2 Log on to QDP

Address: <http://chinese-quartet.org/>

← → ↻ 不安全 | chinese-quartet.org/#/dashboard

Quartet 中华家系1号

Overview Reference Materials Multiomics Data Quality Assessment Reference Datasets

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The Quartet Data Portal only supports access from modern browsers, such as Chrome, Safari, Firefox or Edge.

We're announcing the release of our new documentation service >>> <https://docs.chinese-quartet.org> <<<

## The Quartet Project

Quality Control and Data Integration of Multi-omics Profiling

[Request Reference Materials](#) [Download MultiOmics Data](#) [Analyze Your Omics Data](#)

Multi-omics (or molecular phenomics) profiling at the genomic, transcriptomic, proteomic, and metabolomic levels is the cornerstone of high-throughput technologies for discovering biomarkers for precision medicine. However, the lack of quality control procedures of multi-omics profiling during data generation and data analysis can lead to false findings, raising serious concerns about the reliability of multi-omics studies.

The Quartet Project provides publicly accessible multi-omics reference materials and practical tools to enhance the reproducibility and reliability of multi-omics results. Well-characterized multiomics reference materials and quality control metrics pertinent to precision medicine study purposes can be used to measure and mitigate technical variation, enabling more accurate cross-batch and cross-omics data integration in increasingly large-scale and longitudinal studies such as the International Human Phenome Project.

Data Portal Summary			
Release v1.0 (October 18, 2021)			
Cell Lines	Omics	Reference Materials	Reference Datasets
4	6	20	16
Platforms	Sites	Libraries	Files
26	27	1323	2646

Quartet 中华家系1号

For the Quality Control of Omics Data

[Account Login](#)

Please enter your username.

Please enter your password.

[Register](#) [Forget Password?](#)

Login

Data Policies Help Feedback

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## 2.3 Select Quality Assessment> QC Apps

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Overview Reference Materials Multiomics Data **Quality Assessment** Reference Datasets

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## The Quartet Project

Quality Control and Data Integration of Multi-omics Profiling

[Request Reference Materials](#) [Download MultiOmics Data](#) [Analyze Your Omics Data](#)

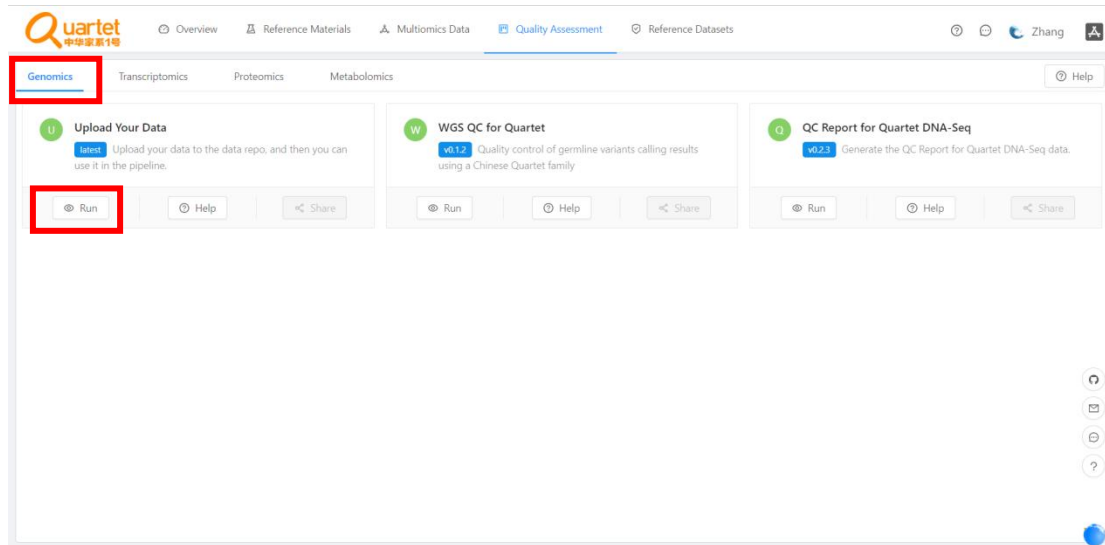
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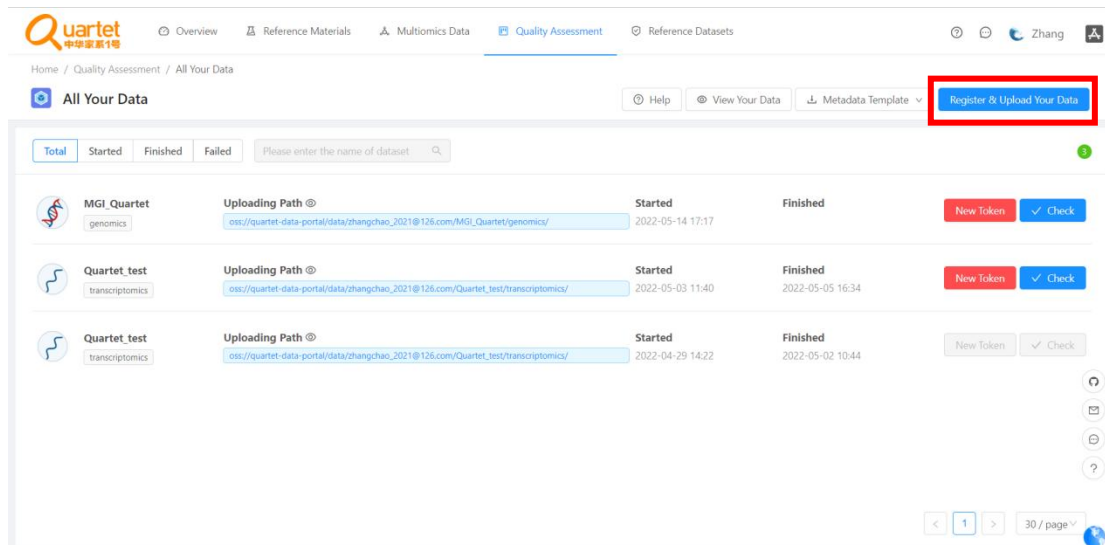
Data Portal Summary			
Release v1.0 (October 18, 2021)			
Cell Lines	Omics	Reference Materials	Reference Datasets
4	6	20	16
Platforms	Sites	Libraries	Files
26	27	1323	2646

### 3. Upload DNA sequencing data

#### 3.1 Select Genomic> Upload Your Data> Run



#### 3.2 Click the symbol called “Register & Upload Your Data”



### 3.3 Fill in Dataset Name, DataType select Genomics, and click Submit

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Overview Reference Materials Multomics Data Quality Assessment

Home / Quality Assessment / All Your Data

All Your Data

Total Started Finished Failed Please enter the name of dataset

MGI\_Quartet\_test genomics Uploading Path oss://quartet-data-portal/data/zhangchao\_2021@126.com/MGI\_Quartet\_test/genomics/

Quartet\_test transcriptomics Uploading Path oss://quartet-data-portal/data/zhangchao\_2021@126.com/Quartet\_test/transcriptomics/

Quartet\_test transcriptomics Uploading Path oss://quartet-data-portal/data/zhangchao\_2021@126.com/Quartet\_test/transcriptomics/

Register & Upload Your Omics Data

Notices The uploading path will automatically generate after you submit the form. If you want to access the same path as before, please enter the same information.

Your Data Will Be Uploaded To oss://quartet-data-portal/data/zhangchao\_2021@126.com/MGI\_Quartet\_test/genomics/

Dataset Name MGI\_Quartet\_test

Contact Email zhangchao\_2021@126.com

Manager zhangchao\_2021@126.com

DataType Genomics

Description Please enter the description

Cancel Submit

### 3.4 Click the symbol called “New Token”. Copy the authorizedCode, which is for subsequent ossbrowser login

Quartet 中华家第1号

Overview Reference Materials Multomics Data Quality Assessment Reference Datasets

Home / Quality Assessment / All Your Data

All Your Data

Total Started Finished Failed Please enter the name of dataset

MGI\_Quartet\_test genomics Uploading Path oss://quartet-data-portal/data/zhangchao\_2021@126.com/MGI\_Quartet\_test/genomics/

MGI\_Quartet\_test genomics Uploading Path oss://quartet-data-portal/data/zhangchao\_2021@126.com/MGI\_Quartet\_test/genomics/

Quartet\_test transcriptomics Uploading Path oss://quartet-data-portal/data/zhangchao\_2021@126.com/Quartet\_test/transcriptomics/

Quartet\_test transcriptomics Uploading Path oss://quartet-data-portal/data/zhangchao\_2021@126.com/Quartet\_test/transcriptomics/

New Token Information (Only Show Once)

Download

AuthorizedCode: jvzs4zS401H0kZpTEj+kE5pYE8+hX1MhAcYtZ3twZQK6QAT8+8rD3jZzn+Hiv nC7Vbb2wOhmmTrBDZqVe64pFN2H1B1o3Hs+Ccow9tGEcrTUMSxxp1h+/KAq

Finished New Token ✓ Check

Finished New Token ✓ Check

Finished New Token ✓ Check

Finished 2022-05-05 16:34 New Token ✓ Check

Finished 2022-05-02 10:44 New Token ✓ Check

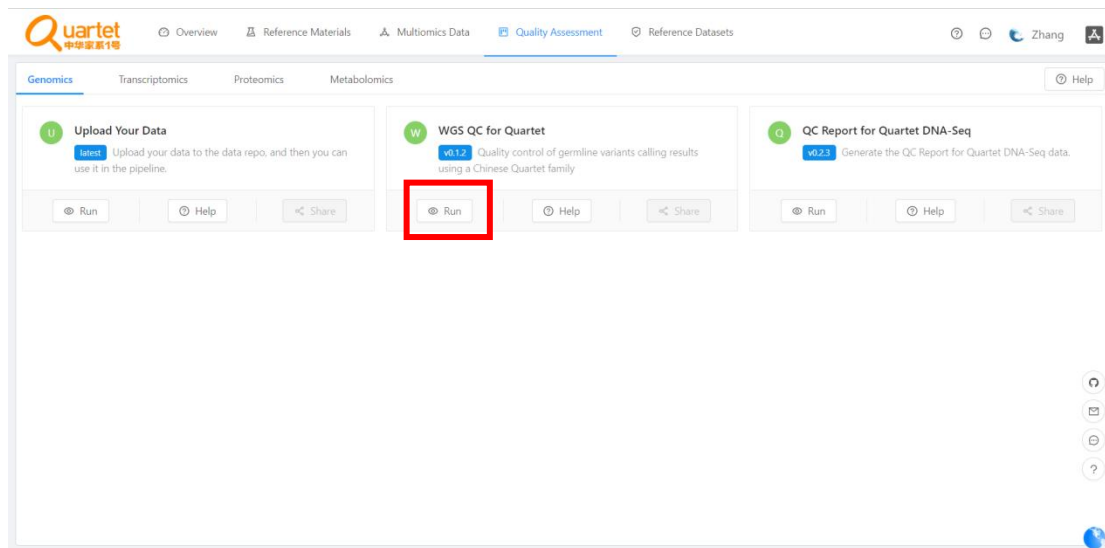
### 3.5 Please follow the ossutil document to upload your data.

ossutil is a user friendly command line tool to upload data to the Quartet Data Portal. It supports the following operating systems: Windows, Linux, and macOS. You can download and install the ossutil version that best suits your requirements.

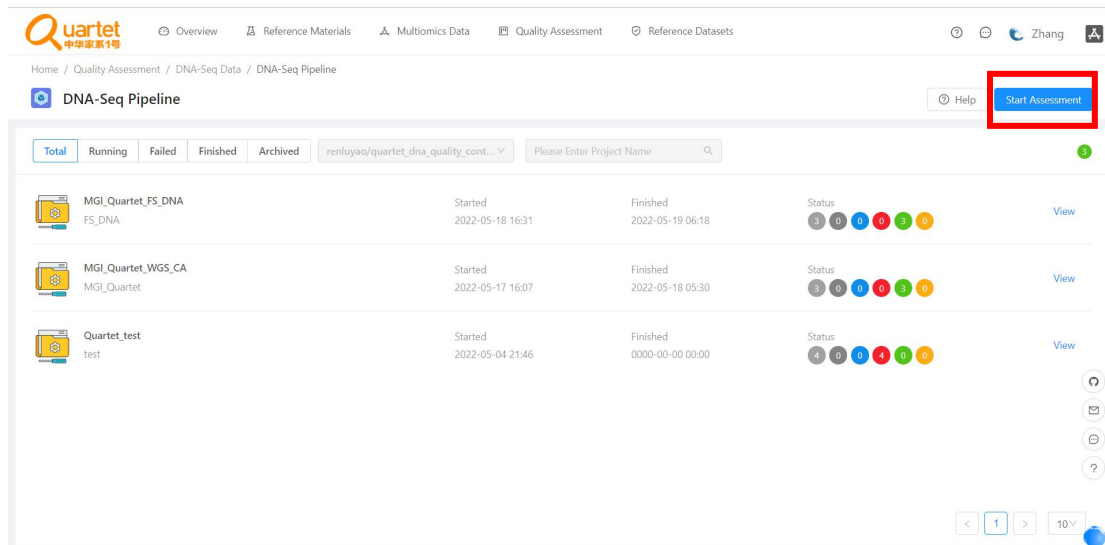
<https://docs.chinese-quartet.org/tools/ossutil/>

## 4. Run WGS app

### 4.1 Select Genomic> WGS QC for Quartet> Run



### 4.2 Click the symbol called “Start Assessment”



### 4.3 Fill in Assessment Name and Description. Then click Next.

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Overview Reference Materials Multiomics Data Quality Assessment Reference Datasets

1 General Information 2 Assessment Parameters 3 Submit

\* Assessment Name: MGI\_Quartet\_test

\* Description: MGI\_Quartet\_test

\* Started Time: 2022-06-04 12:33:52

\* Group: Quartet Team

\* Assessment App: renluyao/quartet\_dna\_quality\_control\_wgs\_big...

Reset Next

### 4.4 Fill in Sample information

Sample ID should be numbers. It is set D5+D6+F7+M8 Four samples as a group, Sample ID for one group of samples filled in 1, Sample ID for two groups of samples filled in 2, Sample ID for three groups of samples filled in 3. Assessment Parameters can be downloaded and checked.

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Overview Reference Materials Multiomics Data Quality Assessment Reference Datasets

Sample ID ⓘ

1

\* FASTQ/VCF File?

☒ FASTQ ☐ VCF

\* D5 Read1 Files

+ Select Files

LCL5\_CA\_DNA\_D5\_4\_R1.fastq.gz

\* D5 Read2 Files

+ Select Files

LCL5\_CA\_DNA\_D5\_4\_R2.fastq.gz

\* D6 Read1 Files

+ Select Files

LCL6\_CA\_DNA\_D6\_4\_R1.fastq.gz

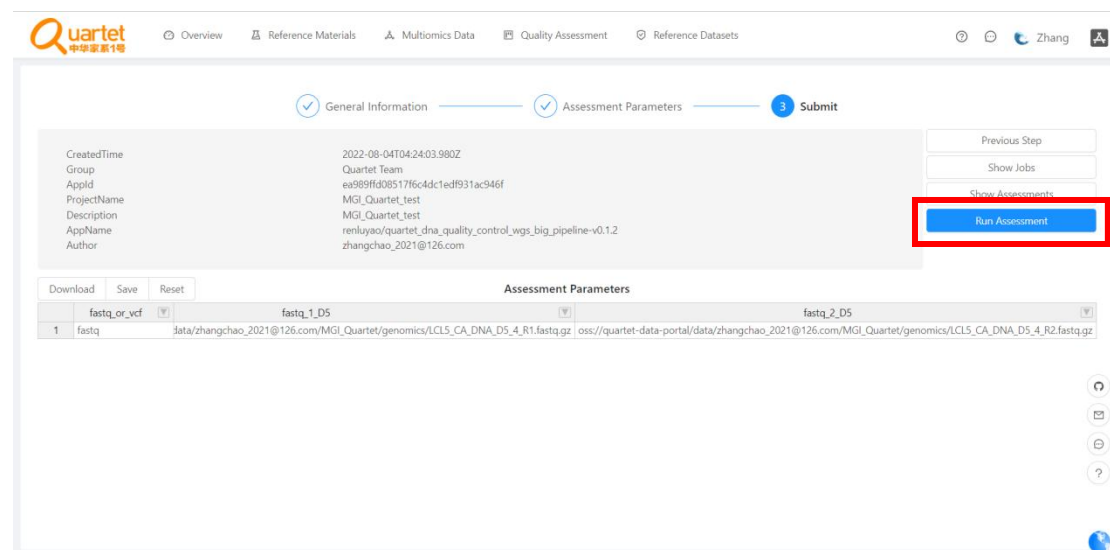
\* D6 Read2 Files

+ Select Files

LCL6\_CA\_DNA\_D6\_4\_R2.fastq.gz

\* F7 Read1 Files

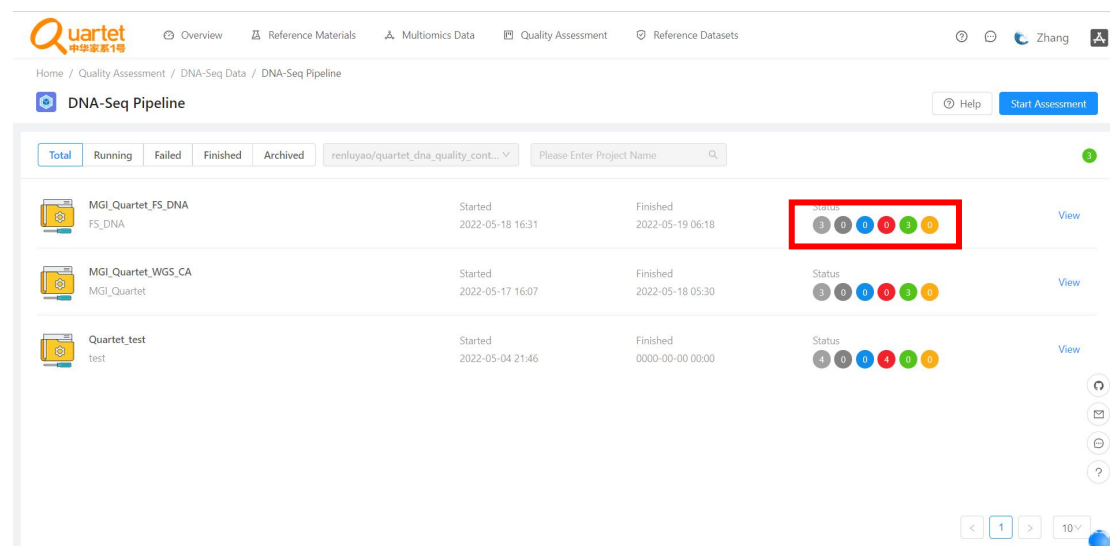
## 4.5 Click the symbol called “Run Assessment”



The screenshot shows the Quartet Quality Assessment interface. The top navigation bar includes links for Overview, Reference Materials, Multiomics Data, Quality Assessment, and Reference Datasets. The main content area has a progress bar with three steps: General Information, Assessment Parameters, and Submit. The General Information step is active, displaying project details such as CreatedTime, Group, AppId, ProjectName, Description, AppName, and Author. A red box highlights the 'Run Assessment' button in the top right corner. Below the project details, there is a table for Assessment Parameters with columns for Download, Save, and Reset. The table contains one row with the following data: fastq\_or\_vcf, fastq\_1\_D5, and fastq\_2\_D5.

Download	Save	Reset
fastq_or_vcf	fastq_1_D5	fastq_2_D5

## 4.6 Check the status of Run Assessment

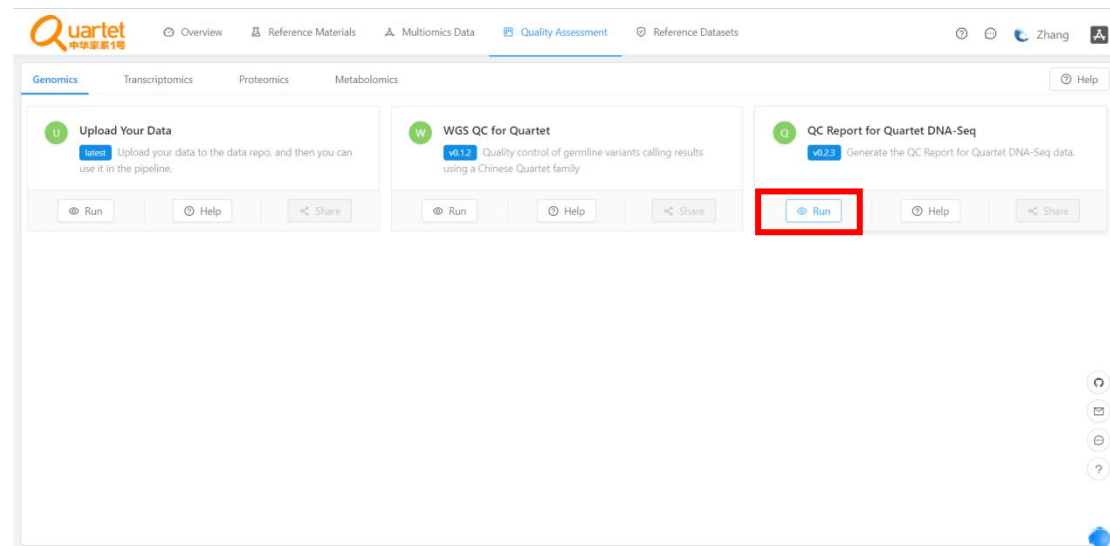


The screenshot shows the Quartet Quality Assessment interface. The top navigation bar includes links for Overview, Reference Materials, Multiomics Data, Quality Assessment, and Reference Datasets. The main content area has a progress bar with three steps: General Information, Assessment Parameters, and Submit. The Assessment Parameters step is active, displaying a table of assessment results. The table has columns for Name, Started, Finished, and Status. The Status column shows a progress bar with a red box highlighting the 'Run Assessment' button. The table contains three rows of data:

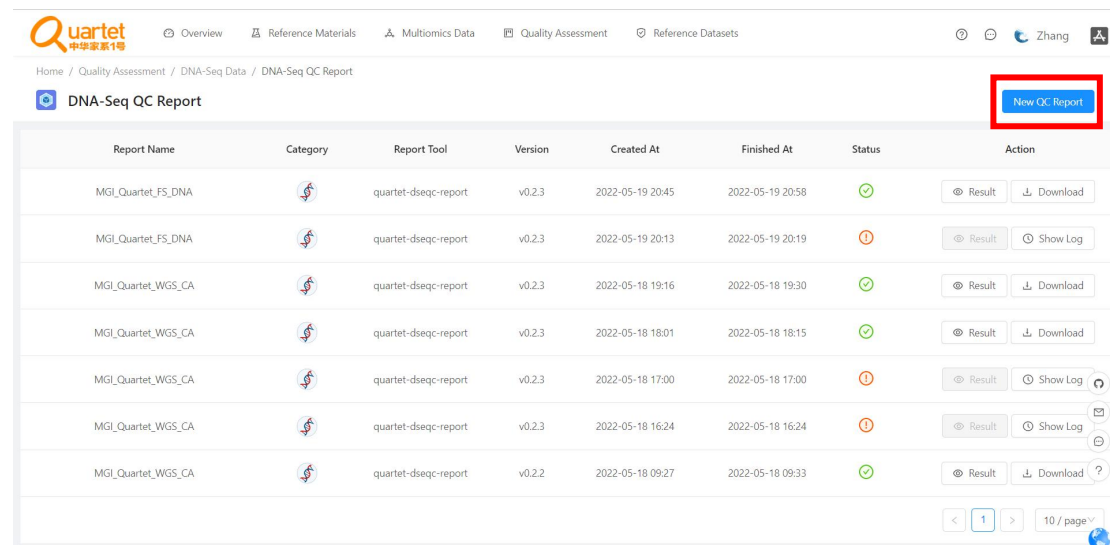
Name	Started	Finished	Status
MGI_Quartet_FS_DNA	2022-05-18 16:31	2022-05-19 06:18	3 0 0 0 0 0
MGI_Quartet_WGS_CA	2022-05-17 16:07	2022-05-18 05:30	3 0 0 0 0 0
Quartet_test	2022-05-04 21:46	0000-00-00 00:00	4 0 0 0 0 0

## 5. Results and Report

### 5.1 Select Genomic> QC Report for Quartet DNA Seq-Run



### 5.2 Click the symbol called “New QC Report”





## 5.3 Follow the Steps as prompted

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Overview Reference Materials

Home / Quality Assessment / DNA-Seq Data / DNA-Seq QC Report

**DNA-Seq QC Report**

Report Name	Category
MGI_Quartet_FS_DNA	
MGI_Quartet_FS_DNA	
MGI_Quartet_WGS_CA	
MGI_Quartet_WGS_CA	
MGI_Quartet_WGS_CA	
MGI_Quartet_WGS_CA	
MGI_Quartet_WGS_CA	

**New QC Report**

Step1: Choose Report Step2: Load Project & Submit

**Notices**  
Please select the expected quality assessment tool from the following list, after selecting the tool, the corresponding guidance message will appear.

Category	Name	Description	Version	GitHub
	QC Report for Quartet DNA-Seq	Generate the QC Report for Quartet DNA-Seq data.	v0.2.3	

**Quartet** 中华家第1号

Overview Reference Materials

Home / Quality Assessment / DNA-Seq Data / DNA-Seq QC Report

**DNA-Seq QC Report**

**New QC Report**

Step1: Choose Report Step2: Load Project & Submit

**Notices**  
Please select the completed project from the dropdown menu below and the QC report tool will automatically extract the required data from the results file generated by the 'WGS QC for Quartet' app and generate a QC report. If you do not find the expected project, please check whether the corresponding analysis has been completed properly.

MGI\_Quartet\_FS\_DNA

MGI\_Quartet\_FS\_DNA

MGI\_Quartet\_WGS\_CA

```

"description": "FS_DNA",
"appName": "renluyao/quartet_dna_quality_control_wgs_big_pipeline-v0.1.2",
"appId": "ea989ff08517f6c4dcdedf931ac946f",
"author": "zhangchao_2021@126.com",
"groupname": "Quartet Team",
"startedAt": "2022-05-18 16:31",
"finishedAt": "2022-05-19 06:18",
"samples": [
{
"fastq_2_F7": "oss://quartet-data-portal/data/zhangchao_2021@126.com/MGI_Quartet/genomics/LCL7_FS_DNA_F7_1_R2.fastq.gz",
"fastq_1_F7": "oss://quartet-data-portal/data/zhangchao_2021@126.com/MGI_Quartet/genomics/LCL7_FS_DNA_F7_1_R1.fastq.gz",
"fastq_2_D6": "oss://quartet-data-portal/data/zhangchao_2021@126.com/MGI_Quartet/genomics/LCL6_FS_DNA_D6_1_R2.fastq.gz",
"fastq_1_D6": "oss://quartet-data-portal/data/zhangchao_2021@126.com/MGI_Quartet/genomics/LCL6_FS_DNA_D6_1_R1.fastq.gz",
"fastq_2_H8": "oss://quartet-data-portal/data/zhangchao_2021@126.com/MGI_Quartet/genomics/LCL8_FS_DNA_H8_1_R2.fastq.gz",
"fastq_1_D5": "oss://quartet-data-portal/data/zhangchao_2021@126.com/MGI_Quartet/genomics/LCL5_FS_DNA_D5_1_R1.fastq.gz",
"facta_nr_vrf": "facta"
}
]

```

Cancel Submit

**Quartet** 中华家第1号

Overview Reference Materials Multiomics Data Quality Assessment Reference Datasets

Home / Quality Assessment / DNA-Seq Data / DNA-Seq QC Report

**DNA-Seq QC Report**

New QC Report

Report Name	Category	Report Tool	Version	Created At	Finished At	Status	Action
MGI_Quartet_FS_DNA		quartet-dseq-report	v0.2.3	2022-05-19 20:45	2022-05-19 20:58	✓	Result Download
MGI_Quartet_FS_DNA		quartet-dseq-report	v0.2.3	2022-05-19 20:13	2022-05-19 20:19	⚠	Result Show Log
MGI_Quartet_WGS_CA		quartet-dseq-report	v0.2.3	2022-05-18 19:16	2022-05-18 19:30	✓	Result Download
MGI_Quartet_WGS_CA		quartet-dseq-report	v0.2.3	2022-05-18 18:01	2022-05-18 18:15	✓	Result Download
MGI_Quartet_WGS_CA		quartet-dseq-report	v0.2.3	2022-05-18 17:00	2022-05-18 17:00	⚠	Result Show Log
MGI_Quartet_WGS_CA		quartet-dseq-report	v0.2.3	2022-05-18 16:24	2022-05-18 16:24	⚠	Result Show Log
MGI_Quartet_WGS_CA		quartet-dseq-report	v0.2.2	2022-05-18 09:27	2022-05-18 09:33	✓	Result Download

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