|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Package Name:** | | | | |
|  | **Prerequisites** | **Answer** | | **Comment** |
|  | Does the package fulfill the following criteria?   * Source code is internally available (e.g., via GitLab) * Is there unit testing covering more than 80%? |  |  |  |
| **LOW RISK** | **Question 1** | **Answer** | | **Evidence, if Yes** |
| Is the package a “low risk support package”, e.g., one devoted solely to format, display or visualize the output or is simply a data package?  *A package is* not *a pure display or data package if it performs statistical calculations, e.g., to compute quantiles, confidence intervals, or density estimates. See* [*here*](http://go/davinci-viz-examples) *for further details examples and* [*check this list of known packages.*](http://go/davinci-viz-pkgs)  *Packages that merely provide some limited level of interactivity (e.g., zoom, hover text) may still be considered display packages. If you are unsure, please select nothing.* |  |  |  |
| **MEDIUM RISK** | **Question 2** | **Answer** | | **Evidence, if Yes** |
| Are there any peer-reviewed publications about the package in reputable journals?  [*Check the list of Novartis approved journals*](http://go/davinci-trusted-journals) |  |  |  |
| **HIGH RISK** | **Question 3** | **Answer** | | **Evidence, if Yes** |
| Does the package possess a filled-out validation plan/report-style document?  See the template in [go/davinci/sos/internal-vpvr](http://go/davinci/sos/internal-vpvr) | NO | YES |  |
| **If all answers are NO in the assessment form, the package will not be installed on DaVinci** | | | | |

## Disclaimer

When information for a given package cannot be retrieved, e.g., by automated tools such as {brave} (formerly {qcNvs}), checkboxes may be left unticked. For the purpose of risk determination these rows should be treated as “NO” until further research indicates otherwise. Similarly, if a row qualifies a package to be part of a lower-risk group, questions related to higher-level sections may be skipped, as they do not impact the outcome of the assessment.

## Low Risk Package

The package can be seen LOW RISK, if at least one answer is YES on the questions in the green section. For low-risk packages only a basic R CMD check is required.

## Medium Risk Package

The package can be seen as MEDIUM RISK, if at least one answer is YES on the questions in the yellow section and the package does not qualify to be LOW RISK.

To mitigate the risk in this group, an R CMD check is required and review of the publications recommending the package or evaluation of the package test cases, which were executed by the package author or other users. The evidence of this review should be attached to the risk assessment form.

## High Risk Package

If all answers in the LOW RISK and MEDIUM RISK sections are NO and at least one answer in the HIGH RISK section is YES, then the package should be considered high-risk or potentially dangerous.

Especially, while installing those packages extra pre-cautions should be taken during testing. The installation testing and user acceptance testing are required in order to confirm the quality of the package and its functions.

## Note

Packages that do not fulfill the above criteria (i.e., prerequisites are not fulfilled, or all other questions are "No") will not be installed on DaVinci as is. In order to be added to DaVinci, those packages must be treated separately (e.g., through cloning/forking followed by internal package validation). Contact the [Scientific Open Source (SOS) Management Team](mailto:DaVinci_R_Package_Mgmt_PRJ@dl.mgd.novartis.com) for further guidance.