

# **Swedish Arthroplasty Register Industry Application**

### Volume

In this module, you can track the number of implants inserted at the article number level across various units in Sweden.

When it comes to unit selection, you can view specific units, or a national total. The type of operation refers to whether the implant was inserted during a primary operation or a revision. Under prosthesis type, one can choose to view total hip replacement, hemi arthroplasty, or both. The type of implant is a grouping of parts into cup, stem, caput, liner and so on. The dropdown for 'article' refers to the article number of the component.

The selected dates must cover a period of at least 28 days and fall within the range of 1999-01-01 and today's date. Data entered after the latest published annual report should be used with caution as it is not complete or validated. At the bottom of the table, one can see a summary of the number of components.

If the text 'No cases for selected models/articles' appears on the screen, no registered data is available. The sorted data can easily be exported to an Excel sheet or CSV.

### Market share

In the module, you can view market shares for different types of articles at the regional level. Market shares refer only to implants used in primary operations.

In the first dropdown menu 'County', you choose either specific counties or the whole country. Under prosthesis type, you can select all types of prostheses, total or hemi. The available options for fixation method are uncemented, cemented, hybrid, reverse hybrid, resurfacing, and not specified. 'Not specified' mainly refers to components inserted in the past year that have not yet been supplemented with cement information. Supplementation is done continuously throughout the year. The types of implants are grouped as in previous modules.

The column 'n' returns the number of components inserted by your own company, and the column 'N' shows how many components have been inserted in total in Sweden, regardless of manufacturer. The market share is then calculated based on the ratio between 'n' and 'N'.

The operation date refers to the date of the primary operation. The selected dates must cover a period of at least 28 days and fall between 1999-01-01 and today's date. Data entered after the most recently published annual report should be used with caution, as it is not complete or validated.

The sorted data can easily be exported to an Excel sheet or CSV.



#### Revision

In the revision outcome module, it is possible to track how many articles at the article number level have been revised during a given time period.

Regarding primary prosthesis type, you can choose between total or hemi prostheses, or all. Under the cause of revision type dropdown, you have the option to sort by the reason for the revision, including aseptic loosening, deep infection, dislocation, and all causes.

The selected dates must cover a period of at least 1 year and fall between 1999-01-01 and today's date. The date range refers to the date the implant was inserted. Data entered after the latest published annual report should be used with caution as it is not complete or validated.

If the text 'No cases for selected models/articles' appears on the screen, no registered data is available.

# **Implant Survival**

In the fourth module, Implant Survival, the survival of the implants is visualized in the form of an implant survival graph.

In this module, one can choose different stem models, stem articles, cup models and cup articles. Under the cause of revision type dropdown, you have the option to sort by the reason for the revision, including aseptic loosening, deep infection, dislocation, and all causes.

Implant survival refers to the first revision after the primary operation. The date specified refers to the date of the primary operation. The selected dates must cover a period of at least 1 year and fall between 1999-01-01 and today's date. The primary operations within the selected time interval are followed until today's date or until the number of operations at risk falls below 50. Data entered after the latest published annual report should be used with caution, as it is not complete or validated.

If the message 'To few cases for survival analysis' appears on the screen, there are fewer than 50 operations at risk, and the data will not be shown. If the message 'Too few revised cases (< 10) for meaningful analysis' appears, there are less than 10 revisions, and the data will not be shown. This is to ensure data quality.

For the Kaplan-Meier graph, a 95% confidence interval is shown as shading in the graph.

The graph can be exported to a PNG file (image file). Tabular data can also be exported by pressing the Excel button. The same points shown graphically are exported.

By hovering the cursor over the graph, you can quickly retrieve data for individual points.



## **ODEP**

This module can be used as a support tool when filling out documentation for ODEP ranking. It includes only primary operations in the analysis.

You make your selections regarding operation date, fixation method, stem, cup, caput, liner and years of follow-up.

The 'to' date in the selected time span must be less than today's date minus the years of follow-up minus one day. For example, if today's date is 2024-10-15 and years of follow-up is 1, the 'to'-date must be less than or equal 2023-10-14. The selected dates must cover a period of at least 1 year and fall between 1999-01-01 and a date as previously described.

To obtain complete information, you need to click the Excel button or CSV. The subsequent information follows the same flow as the ODEP form.