

**What is METEOR?**

METEOR has been founded by the MERIT foundation, in order to stimulate treat-to-target, improve patient care and create an international rheumatoid arthritis (RA) research database.
Since 1 April 2019, a spondyloarthritis (SpA) research database has been added as well. In METEOR, all patients with a clinical diagnosis of RA or SpA can be entered. These can be new as well as existing RA patients, who are followed according to usual care.
For each patient, patient and disease characteristics, patient and physician reported outcomes, disease activity, physical functioning and prescribed treatment can be registered. Based on the available data, we automatically calculate a range of disease activity measures (e.g. DAS, DAS28, SDAI, CDAI, RAPID3 for RA patients and ASDAS, BASDAI and ASAS health index for SpA patients). Furthermore, the HAQ or BASFI and the EQ5D can be completed. These data are subsequently available for research.
In recent years, an increasing number of hospitals have implemented Electronic Health Record Systems to record daily patient care. Therefore METEOR has developed upload facilities. The upload facility can be used to upload data from local databases in the METEOR database. This can be a single upload, but it can also be a recurring upload of all data recorded in a local register (e.g. data could be uploaded every quarter of a year). This is currently for example done in the Netherlands, Portugal and India. Using the upload facilities enables users to benefit from the benchmark and research facilities, without the problem of data entry or having to give up local registries.
Alternatively, data can be uploaded using our digital pdf forms for RA or SpA patients, which are available at our website. Each pdf form contains data of 1 visit per patient. Multiple pdf forms can be uplaoded simultaneously.
Currently, the METEOR database contains data from >48,000 patients and >280,000 visits, added by 78 sites using the METEOR tool and 50 sites using the upload facilities. These data stem from 32 different countries, which are ever increasing.

**Data protection**

Data upload at the METEOR website is protected by two-step authorization using Google authenticate. Patients are followed according to daily practice and no additional measurements are needed before entry into METEOR. Furthermore, all patient data in the METEOR database are anonymized, according to European GDPR regulations. Therefore, for none of the currently included countries – for example the Netherlands, South-Africa, Mexico and the USA – an informed consent is needed when adding new patients to the database.

**Data ownership and research possibilities**

All METEOR users who are actively contributing data can perform research in the database. The leading principle is that each participating rheumatologist or centre is the owner of its own data. Therefore, each user can at any time perform research and publish articles using his/her own data without previous permission from the METEOR board.



Researchers can also submit research proposals with a request to perform research on (a part of) the complete METEOR database. These research proposals are assessed by a scientific committee regarding relevance, quality and ethical aspects. The scientific committee consists of the METEOR board members and representatives of several hospitals contributing to METEOR.
Furthermore, for sites adding considerable amounts of data to a research project, a co-author is listed on the resulting publication. Research proposals without a request for funding can be submitted continuously. Research proposals with a request for funding can be submitted once a year. A research proposal format is available on request. Funding can be requested for a maximum duration of 1 year, with a maximum amount of €25,000. For each research project, a scientific representative of the METEOR board is assigned as a mentor. These can be currently prof. Robert Landewé, prof. Désirée van der Heijde, prof. Tom Huizinga or dr. Pedro Machado. Moreover, methodological and statistical support is available.

**Further information**

Further information regarding METEOR can be found at the METEOR website ([www.meteorfoundation.com](http://www.meteorfoundation.com)) or in previous publications regarding METEOR, which are all mentioned at our website. Data entry is possible at our upload website: [www.meteorapplication.com](http://www.meteorapplication.com).

If you have any questions or if you wish to create a METEOR account, please contact Sytske Anne Bergstra, coordinator of METEOR: s.a.bergstra@lumc.nl.